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THE SHORT VIEW AND THE LONG IN ECONOMIC POLICY

Presidential Address Delivered at the Fifty-second Annual Meeting of the American Economic Association, Philadelphia, Pennsylvania, December 27, 1939

Once upon a time an academic economic theorist, by some freak of fate not likely to be often repeated, got himself slightly entangled in the machinery of formulation of government economic policy. What I plan to tell you tonight reflects largely, though not I hope too explicitly, what the process of policy-formulation did to his academic theorizing, and what his theorizing failed to do to the process of policy-formulation.

As an active participant in the policy-making process, the academic theorist suffers from a number of handicaps more or less peculiar to himself. For purposes of teaching, or of acceptable writing for his restricted audience of fellow-theorists, his conclusions are of little importance; and what matters above all is the rigor and elegance of his manner of reaching them. For policy, on the other hand, conclusions are vital, and often are all that is vital. For the purposes of academic theorizing, the premises the theorist starts from may without serious penalty be arbitrarily selected, narrowly restricted in range, and purely hypothetical in nature. But the selection of premises controls the conclusions reached, and for policy-determination it is therefore vital that all the important variables be covered by the analysis, and that the conclusions be not affected by the use of premises which are irrevelant for their purposes or less realistic than it is possible with the aid of available information to make them. To violate these rules in policy-making is to be guilty of the grossest irresponsibility. If he is not to be wholly in the way of the policy-maker, therefore, the theorist must emerge from his ivory tower,—which is almost as hard as to return to it.

The theorist's habitual methods of analysis are such as to lead to "right" or "wrong" answers to manufactured problems, the premises and the criteria of rightness being so chosen as to make this not only possible but necessary. For the policy-maker, however, the problems are for the most part not of his own devising, but are presented to him by outside forces, in vague and ill-defined fashion, and what he asks of his advisers consists as much of help in determining what the problems are as of help in finding solutions for them. The theorist here is likely to find himself uninformed and unskilled.

The theorist's analysis is ordinarily couched in descriptive as distinguished from normative terms. If choices as between social values influence his thought, these choices are largely left implicit in his selection of premises, and are rarely, and then usually apologetically, expressly avowed. The policy-maker, however, is rarely satisfied with purely descriptive analysis. He insists that he be advised not only what will be the objective consequences of a specific line of action, but whether or not these are desirable consequences. While he has always some notions of his own with respect to the values which policy should serve, in my experience he always demands of his economists that they guide him also in the determination of what is socially desirable, and he expects the economist to acknowledge and to display some professional competence in giving such guidance.

There are always a number of different values to be considered, moreover, and satisfaction of one often involves disregard of the other. This makes necessary a sort of weighing process, in which the decision is presumably made partly on the strength of quantitative information as to the number of persons affected by alternative courses of action, their economic status and needs, and so forth, and partly on the basis of a qualitative ranking of values in terms of some sort of scale of worth. The theorist as such here also lacks experience. He is hampered, moreover, by his tendency to dissect the mental processes by which decision is reached in such matters, and he tends to feel and to give discomfort by his reluctance to express in definite and assured terms the conclusions which he knows he has reached only by vague and imperfectly communicable processes of thought.

The effect of the action on the subject is all that the theorist has been trained or conditioned to think about with respect to public policy. The official and the legislator, on the other hand, should, and in any case invariably do, think also of the effect of the action on the actor. The economist conditioned to the purity of abstract thought is liable to be unreasonable in his refusal to recognize that the official, in choosing his time for action and his manner and degree of action, must give regard to their impact on his relations with superiors, colleagues, Congress, and the public, and to their effect on the prestige of his agency and the morale of his staff. But the official must operate in this way if those with whom he has to deal from day to day are to give him that coöperation and good will which are essential not merely for his own personal success and comfort but for the satisfactory execution of his functions.

The higher officials in Washington, whether they be political appointees or career men, in my opinion, need make no apologies for their standards even to college professors, elect of the elect though we be. As far as I have observed, the higher officials in Washington as a group work as hard,

as disinterestedly, coöperate in common tasks as loyally, think as straight within their own special fields of competence, as does the ordinary run of college professor. They certainly do not live on the moral heights continuously, but they are called upon more often than academic men to rise to them, and, in my honest judgment, they respond to the call as often and as fully as in all probability we ourselves should under like circumstances.

In one respect in particular, of special interest to economists, I have observed them with ever-increasing admiration—namely, their patience and generosity in their dealings with their economic advisers. In the course of expounding the economic verities, the economists repeatedly expose their divided counsels. They especially reveal that conflict within their ranks between ancient dogmas and resurrected or newly-invented heresies with which much of the remainder of my talk will deal. Those officials who come into frequent contact with squads of economists, as they note the repeated conflict of testimony, must feel at times like the English judge who remarked that he had for years been trying motoring cases in which two cars, each of them on the right side of the road and each of them stationary, had been involved in a head-on collision—or even like that magistrate in a native court in Ceylon who, disgusted by the flagrant contradictions in the evidence of the successive witnesses, said to the officer of the court: "Call the next liar." This failure of the economists to speak as with one voice is a severe trial for the officials. I suspect, however, that they would find us even more trying if, when unpalatable advice was offered by one economist, they could not feel that there was a good chance that with a little search another economist could be found happy to swear that the advice which had been given was incredibly bad economics, or even was "orthodox" or "sound" economics, which are now very forceful epithets indeed in some high quarters.

To proceed with my catalogue of the handicaps of the economic theorist as a policy-maker. The economists of my generation and earlier were trained to concentrate on so-called long-run analysis in their pure theorizing. When they ventured into the discussion of questions of public policy, they accordingly tended to be preoccupied with the long view, with the effects which a given action would have on the more distant future, and to disregard or to weigh lightly its more immediate effects. A good illustration of what I have in mind is the famous poor-law controversy in England in the 1830's. The leading economists of the time all emphasized the allegedly injurious effects on the productive capacity and the will to work and to save of the poor which would result from generous, long-sustained, and assured poor-relief to the able-bodied. They stressed even more the growth of population and the consequent impairment of the basic earning power of labor which they believed would ultimately result

from any substantial liberation of the poor from dependence solely on their own efforts for the means of subsistence of themselves and their children. The extreme conservatives and the extreme radicals of the time—who, as so often in history, were on the same side on a specific issue—and also the humanitarians and clergy, stressed in opposition to the views of the economists the moral and political rights of the needy to be given food and shelter with a minimum of humiliation and of deliberate interference with their accustomed patterns of family and social life. In this instance, as in many others, it was possible plausibly to picture the clash between the long view and the short as a clash between the humane and the hard-hearted, although the economists of the time of course insisted that the policy they advocated, while immediately severe, would ultimately prove to be the kinder of the two to the poor.

Although it is obviously not without direct relevance to present-day problems, I am not concerned here with the merits of this ancient controversy. I have cited it only to help make clear the differing turn which may be given to public policy accordingly as the long view or the short is dominant, and to illustrate the characteristic approach of the orthodox economist, from that day to this, to policy questions.

Now this habit of taking the long view is not only characteristic of the orthodox economic theorist, but in the discussion of matters of economic policy it is often the principal characteristic by which he can be distinguished from other professional economists or even from the intelligent layman.

In the day-to-day process of adapting public policy to meet felt needs, on the other hand, the problems always manifest themselves in the form of immediate pressures of one sort or another, and the legislator or official tends to look for correspondingly immediate solutions. This is "natural" behavior, in the sense both that it is what one should expect to occur, and that it has its socially useful aspects.

Legislators and officials are typically busy and harried men. Except under the special circumstances of major election campaigns, when the pattern of party debate may by chance turn on the relative merits of the long-run programs of the contending parties, and except for the occasional opportunity of the legislator or the official to divest himself of the cares of the moment and, assuming the rôle of the statesman, to give patient examination to the needs of the future, there is constant preoccupation with the problems which are immediately pressing, and little stimulus to take thought as to whether the proffered solutions are likely to prove lasting ones. There is especially little urge to go hunting for problems which are not yet felt as such but which may prove troublesome in the distant future.

It would be a mistake, however, to take for granted that the immediate

solution, the quickly-working one, is of necessity a defective one. The immediate solution to a problem no doubt frequently serves also with tolerable satisfaction as a permanent one, and in some cases may well be identical with the optimum permanent solution. Many problems, moreover, are themselves temporary in nature, and require therefore only temporary solutions. The immediate solution may be the only one for which public acceptance is obtainable, so that there is really no choice. There are circumstances, moreover, under which even a benevolent dictator, with no need to give heed to public clamor, would be wise to adopt a partial and temporary, but quick-working, solution in preference to a more complete and more lasting one which would yield its benefits only after considerable delay. Mr. Keynes, speaking with at least a trace of the accent of revelation, has told us that in the long run we'll all be dead. What I presume he meant by this apparently crystal-clear dictum was that if we took the long view, we, including our otherwise potential posterity, would—or might—all be dead—or dead or unborn—before that view could justify itself. This warning is scarcely much needed either by the public official or by the ordinary legislator, but for the reasons I have stated and not only because in respectable communities the dead and the unborn cast no votes. But for the academic economist it is a sound warning, and perhaps even a needed one. In times of severe social strain there may be real menace of catastrophe if there is not resort, even at the cost of bad after-effects, to a quick-working remedy which tides the economy over the crisis. At such times, the patience of the orthodox theorist may be out of place. But in the past, at least, such times have come only rarely.

Closely related to the habit of the theorist of preoccupying himself with those effects of proposed legislation which are more distant in time is his habit of searching for the repercussions of legislation which are so-to-speak more distant in space. Politicians are experts in tracing one kind of repercussion, the *political*. But they are indisposed to take account of *economic* repercussions, as the history of tariff controversy abundantly demonstrates. This indisposition, I think, they share with the general lay public, to whom, in matters of economic analysis, one step at a time is enough, if not too much. And since what the public doesn't know can't hurt the legislator, he has at least no selfish motive for following the theorist in his unsteady and circuitous wanderings from the proximate to the secondary, to the tertiary effects, and is content to act in terms of the seen, with worry about the unseen left to the economic theorist as a sort of occupational psychosis.

I do not include in my list of the handicaps peculiar to the economic theorist as a participant in the policy-formulating process two items which would probably appear high on such a list if prepared by those with whom the economist works—namely, first, his ignorance as a rule of the

legal framework and legal folklore to which legislative drafting and the administration of the laws must conform; and second, his lack of experience and insight with respect to what is and what is not administratively feasible. These are omitted, however, not because the ordinary economist does have command of these skills, and not because they are unimportant, for such is decidedly not the case in either instance. But barriers to effectiveness of this general type, instead of being peculiar to economic theorists, are common to all kinds of specialized participants in a coöperative enterprise such as policy-formulation which makes demands upon a wider range of skills than single individuals can reasonably be expected to possess. The lack of legal and administrative training on the part of the economic theorist may be regrettable, but it is not fatal as long as he is not permitted to decide policy questions all on his own.

In the ordinary course of events, policy is, of course, ultimately decided not by the technical experts as such, whether they be economists or engineers or political scientists or sociologists, but by the legislators and the responsible executives with the aid of advice by the experts. That excellent formula, "The expert *should be* on tap, not on top" would be almost equally valid if it went, "The expert *is* on tap, not on top." This applies no more and no less to the economist than to the other professions—except for the lawyer, who is on tap *and* on top, and omnipresent, omniscient, omnipotent, and omnivorous in addition. In the process of tapping the experts for their specialized knowledge and skills, the technical equipment of one profession provides the offset for the gaps in the capacities of the others. And for those many things which in a world not clearly designed for full comprehension by man are beyond human knowledge, the lawyer always stands ready to provide precise formulae acceptable to the Supreme Court as unambiguous expressions of legislative intent.

Even with these two items omitted, the list of handicaps of the academic economic theorist as a participant in the formulation of public policy which I have given is discouragingly long. Others, moreover, would probably think they could easily make it even longer and even more discouraging to the theorist. Let it be clear, however, that I am not identifying the few "academic economic theorists" with economists in general, and that I recognize that there are many other types of economists whose serviceability in policy-formulation and in other activities of government has been amply and unquestionably demonstrated.

The non-theoretical economist, in particular, or the economist who disclaims any theoretical prejudices, is in fact much more adaptable to public service than the economic theorist with some body of theory to which he remains faithful, whatever its species. The non-theorist can adjust himself quickly to the changing flow of events and issues. He is not bound by any set mode of analysis. His mind but lightly encumbered by doctrines,

dogmas, preconceptions, or even in some cases thoughts, the fortunate man can move freely in any direction, wherever the wind may list. If he feels the need for guidance, there is always available today yesterday's position of his official superiors and tomorrow the different position they took today. In finding good-sounding reasons for what has already been decided upon, he has a distinctive and useful function, both because the vitality of the democratic process is dependent upon our continuing to believe that it provides us with reasonably wise and beneficent government, and also because statesmen's intuitions have often a genuine economic logic dimly in their background. He shares also with other types of economists the useful rôle of finding good uses for bad laws, and thus contributes to the most important function of the art of public administration: the making of silk purses out of legislative sows' ears.

The handicaps of the academic theorist of the older dispensation as a useful member of a policy-formulating staff are probably even more clearly visible to other members of the *economic* profession than to members of *other* professions. There is in fact a definite cleavage between the habits of thought of this species of theorist and those of other groups in the profession, including many of those who help guide Leviathan in its daily gyrations. The continued depression has obviously made a deep impression on the latter, and made them impatient of or even violently hostile to the traditional corpus of economic theory, which they look upon as an instrument for the exercise of the tyranny of the dead mind over the living. They seem to believe increasingly that its rôle has been, even in the long-past days of its almost unchallenged dominance, "to light fools the way to dusty death." The world it approvingly describes of atomistic competition, and the ethical approval which, as they read it, it translates to the actual world by its failure clearly to contrast the ideal with the real, make it appear to them too far divorced from the present-day realities and values to warrant faith in its usefulness as an aid to the guidance of social policy. Instead of the economy of effective competition, of freedom of individual initiative, of equality of economic opportunity, of steady and full employment, pictured in the traditional theory, they see an economy dominated by giant corporations in almost every important field of industry outside agriculture, an economy marked by great concentration of wealth and economic power, and great disparity of income and of opportunity for betterment. They note the apparently unending flow of evidence from investigating committees and courts of the flagrant misuse of concentrated economic power. They observe with alarm the failure of our economy for ten successive years to give millions of men able to work and anxious to work the opportunity to earn their daily bread. And seeing the actual world so, they refuse to accept as useful for their purposes a type of economic theory which as they read it either ignores these evils or treats

them as temporary, self-correcting aberrations or excrescences of what is basically a sound economic system. Having rejected the conventional picture of the system, they tend increasingly to adopt another one, rapidly approaching equal conventionalization, but following another pattern, in which the evils are inherent in the system and cannot be excised without its drastic reconstruction and its substantial operation by government.

Their account of the traditional economic theory is not wholly a caricature, but it is overdrawn and distorted. It deliberately disregards the failure of government to behave according to the rules laid down by the orthodox theory as necessary if its conclusions are to have practical validity, and it especially overlooks the long line of great men in the orthodox tradition, by no means already at an end, who by no stretch of the imagination can be charged with having exploited it to protect evils against reform. But this is in the present connection significant only as it prejudices these zealous reformers against utilizing for their own good purposes the aid the old doctrines can still furnish. Their picture of the evils of the present economic system may also be painted in too strident colors, but it is undoubtedly close enough to the truth to make complacency indefensible. Where in my opinion they are most gravely in error, however, is that in rejecting lock-stock-and-barrel the traditional economic theory, they are abandoning habits of mind and analytical tools which are still essential if evils are not only correctly to be identified but are to be ascribed to their proper causes, and if remedies are not to be advocated which may prove worse than the diseases they are prescribed for.

As a by-product of the breach with the older body of doctrine, the economic profession is tending to wipe out that line of cleavage which in this country has been so marked almost since the foundation of the Economic Association between the teachings of the professional economists, on the one hand, and the practices of government and the beliefs of the lay public, on the other hand. I, for one, would welcome this reconciliation if it resulted from our final conversion of the lay public. I think, however, that the reverse has happened to a substantial extent, and that economic doctrine is now following public opinion and government practice much more than it is influencing them. For obvious reasons which have no counterpart in this country, this is now of course the routine situation in totalitarian countries. Its occurrence in this country is not, I am certain, due to any significant extent to a new subservience of the profession to external opinion. Its explanation lies largely, I think, in the fact that under the impact of depression conditions the economists have in large numbers abandoned the traditional economic doctrines, with their emphasis on the long view, and have turned instead to the short view which government and the lay public have always tended to take. It is true that in adopting the short view many of the younger economists have not merely taken

over the lay notions bodily. Some of them have, in fact, given them a theoretical elaboration which for subtlety, refinement, and elegance need make no apologies to the older economics, and which remains faithful to older theorizing in at least one respect, that the tradition of unintelligibility to the layman is scrupulously observed. It is the quality of the judgment displayed, and not the quality of the analytical skill, which I venture to question. No matter how refined and how elaborate the analysis, if it rests solely on the short view it will still be close to the layman's economics and still be a structure built on shifting sands.

My aim this evening is not to praise the old-fashioned economic theorist, but only to help protect him from premature burial. The strongest line of defense I find available is the argument that he is the special custodian for society of the long view in economic matters, and that even in troubled periods that view is entitled not to undisputed dominance but to a full hearing. Since its value with reference to any specific issue can be tested only empirically and therefore only after a substantial period of time has elapsed, I shall present my case for the long view forward by taking the long view back into history with respect to several of the doctrines in the orthodox tradition. Not to make it too easy for myself, I shall deal only with doctrines that have been so conventionalized through time that they seem to the short-viewers flagrant examples of the freezing of doctrine into dogmas whose venerability is their only claim to virtue.

An underlying characteristic of the orthodox Anglo-American economics during its entire period of dominance was its basically optimistic outlook on the prospective trend of events. As a cursory inspection of the files of presidential addresses before the American Economic Association and its English prototype would confirm, the economists of the time believed that, despite wars, mistakes in government policy, and cyclical disturbances, private initiative, technological progress, and the improvement and wider diffusion of education had resulted in and would continue to result in a slowly rising secular trend of per capita income, enjoyed by steadily-growing populations. Imbued with this moderately optimistic long view, the economists listened neither to the occasional prophets of impending and lasting woe nor to the more frequent peddlers of patented devices for antedating the millennium. For the period up to 1914 at least, they proved on the whole to have been right. In the flush days of the 1920's, however, we were told: that what was then would continue to be, forever and ever; that the problem of the cycle had been solved by the Federal Reserve Board; and that we had entered upon a new era of perpetual boom. The great bulk of the economic profession, taking the long view, refused to give credence to this blissful picture. How right they proved we are unfortunately only too well aware. The perpetual boom having come to its dramatic end, it later subsequently became increasingly apparent that all the days

of the 1930's were to be black, or gray. Some economists, simulating too closely, I think, the technocrats' over-emphasis of the purely technological elements in economic process and under-emphasis of the compensating and stimulating functions of the price system, and responding too sympathetically to the prevailing depression, have announced a second new era, but this time an era of perpetual gloom, the advent of the stagnant economy. There is even developing among the preachers of the new pessimism impatience with talk in terms of the concepts of business-cycle analysis, as carrying the unnecessarily optimistic implication that what goes down may some day come up. I have no doubt myself that these economists have genuinely succeeded in finding historical trends in our economic structure and process which operate to make the attainment of full employment increasingly difficult. But that must always have been true, and the weight to be attached to such findings should not be decided until equally ardent search has been made for factors operating in the opposite direction. Here, I take it, is an instance where appeal to the long view may save us from accepting as an adequately historical approach what fuller appeal to history would suggest was rather a hysterical approach.

It has long been standard dogma that budgets must be annually balanced, and that public debts must not be allowed to grow indefinitely. Governments, of course, have frequently violated the dogma, and not only have such violations not invariably been followed by disaster, but it would be a difficult task to disprove the proposition that in a substantial number of instances they proved highly beneficial. But as I read the history of the budget-balancing dogma, it developed as a convenient rule-of-thumb protection against the defense of uncontrolled expenditure and continuous deficits by the plea that the appropriate time for budget balancing was not quite yet but just around the corner. I am even convinced that most of the distinguished advocates of budget balancing during the nineteenth century would have conceded, though no doubt grudgingly, that even a continuous growth of public debt, given a moderate and asymptotic pattern of growth, would not in fact necessarily lead to disaster. On this question of the menace of a growing debt that virtuoso of the long view, Adam Smith, maintained his usual balance. When, during the American Revolutionary War, a young friend, Sir John Sinclair, lamented to him the misfortunes, presumably financial, in which the war was involving Britain, and exclaimed, "If we go on at this rate, the nation must be ruined!", Adam Smith replied, "Be assured, my young friend, that there is a great deal of ruin in a nation."

But when for the old dogma that budgets should be annually balanced there is substituted a new dogma that budget balancing is merely a fetish, that as long as there are unemployed resources, whatever the cause of

the unemployment, governments should point with pride to their lusty and bouncing deficits, instead of apologizing for them or shamefacedly concealing them as if they were born out of wedlock, the long view tells me that while this may not be the road to ruin it at least blazes a trail to it. It must not be forgotten that spending in itself is for the spenders the supreme pleasure, is the politicians' delight, and that what temperance in resort to it has prevailed in the past has been wholly due to the belief that somebody, some day, would have to be taxed to pay the bills. Even if this belief were properly to be regarded as completely a myth, it would still be one of the large class of highly useful myths.

Two related theses of the liberal tradition in Anglo-American thought have been: first, that under a system of free individual enterprise a higher level of economic well-being was attainable than under any other form of economic organization; and second, that a society organized on this economic basis was the only one compatible with the maintenance of political democracy. These, of course, are dogmas, not axioms, one economic and the other political in nature. Now that political democracy is under attack, frankly from the fascist right and as menacingly though not as frankly from the communist left which, like the serpent, licks its victim over before it swallows it, the political dogma has become increasingly acceptable even to those who reject the economic dogma. My concern here, however, is only with the economic dogma, whose acceptability has been destroyed or seriously impaired even for many economists by ten years of sustained and severe depression.

There are perhaps some economists who would deny that an individualistic system is at all desirable economically. This view I will not discuss, since even if I were to reject a substantially individualistic system on economic grounds, I should still prefer it, on non-economic grounds, to what seems to me to be its only practicable alternative, a comprehensively-planned economy under which, as some one has said, "All our hairs would be numbered, and all gray." There are many, however, who hold the view that while a system of free individual enterprise would be ideal if attainable, it is no longer possible in these modern days of great concentration of ownership and control of productive facilities, where the economic units are to a large extent huge corporations and trade unions rather than the single individuals of traditional economic theory, and where such competition as persists tends increasingly to be competition between giants instead of the atomistic competition of orthodox theory, and therefore to be cost-raising rather than price-reducing.

When, some four or five generations ago, freedom of private initiative was first systematically advocated as the ideal basis for an economic system, the menace of monopoly to the proper working of a system so organized

was clearly perceived. It was then widely believed, however, that, although business-men admittedly found abhorrent the impact upon themselves of other persons' competition and grasped every opportunity to escape it, monopolistic power could not come into being on a large scale, or at least could not long maintain itself, except with government aid and sanction. In justice to those who were of this view, it should be noted that the grant of a corporate charter was then universally regarded as the grant of a special privilege potentially dangerous to society, and it was therefore then assumed as a matter of course that such grants would be made only sparingly and would be jealously circumscribed, in each specific instance, by restrictions as to permitted size, nature and range of activities, and right of participation in the civil liberties enjoyed by genuine individuals.

Whether now, after several generations of unrestrained grant of corporate charters and of great development of mass-production requiring large economic units for its operation, it is still possible, through proper regulation and restriction by government of the activities of large corporations, to restore an essentially competitive price system, is a question to which I freely confess I do not see a clear answer, although I look forward eagerly for much-needed enlightenment to those sessions of this meeting where this question will be discussed by an exceptionally-qualified group who, I have reason to know, have been giving it very serious and disinterested consideration. The only point I wish to make now is that the old dogma, that monopoly power is basically the product of governmentally protected or sanctioned special privilege and will not survive on a large scale if such special privilege is withdrawn or kept to its practically minimal limits, still has sufficient plausibility to warrant further inquiry. It seems to me a reasonable hypothesis, one worth examination, for instance, that if much of the impressive array of governmental encouragements to monopoly could be removed, or, where removal was impracticable, if government regulation were directed to foster cyclical patterns of price-behavior following the competitive pattern, the chief evil product of monopoly, the price-inflexibility problem, would shrink to easily tolerable dimensions.

Consider for instance, some of the elements in the prevailing pattern of government relationship to monopoly and to price-inflexibility. Promiscuous issue of wide-open corporate charters by the states; until within the last year or two slack and faint-hearted enforcement of the anti-trust laws, already gutted by court sabotage; protection of monopolistic price-structures by the federal tariff; positive encouragement of monopolistic price-practices by such legislation as the N.R.A. act, the Webb-Pomerene act, the Guffey Coal act; so-called "fair-trade" laws which compel businessmen to act as if they were monopolists even if they wish not to; concealed protection of monopoly by doctored building and other ordinances; tacit encouragement to monopoly through acceptance in government contracts,

systematically and without protest, of identical bids and of list prices higher than even the monopolists can obtain in what remains of the open market; approval, and even enforcement, for regulated industries such as railroads, of rate policies which make rates behave even more perversely, as far as cyclical flexibility is concerned, than the prices of unregulated monopolies; encouragement to and protection of labor monopolies; deliberate schooling of agriculture in the pleasures and profits of monopolistic behavior.

The record of government encouragement to monopoly, when looked at in conjunction with government's spasmodic efforts to enforce competition and its intermittent clamor against monopoly, reminds me, and justifiably so, of an old cartoon I once saw, depicting a political demonstration in the streets of London, in which the determined-looking marchers carried two banners, one of which bore the slogan, "NO MONOPOLY!" and the other the slogan, "NO COMPETITION!"

All that I suggest, therefore, with respect to the dogma that free competition can substantially survive if government gives it due protection and encouragement, is not that its validity under modern conditions is obvious, but that we have not the right definitely to reject it before it has been given an honest and thorough test.

As a final illustration of the possible survival of usefulness of old dogmas which were the product of the long view, I cite the proposition that the timidity of capital makes the maintenance of "business confidence" necessary if investment is to be maintained at the level required for sustained prosperity. According to this dogma, the capitalist will hoard his own money, or will send it abroad—be there any safe place to send it—and will refrain from borrowing other people's money for investment purposes, if even a faint shadow is cast on the political security of his investment. The spokesmen for capital have found this dogma very much to their liking, and have been claiming for some six years that a political shadow *has* been cast over the security of their investments, and that this has been responsible for the low rate of new investment, and consequently for the persistence of depression. To reinforce their claims, they have done their trembling in public, with vocal accompaniments.

There is no specific invocation of old dogmas, I understand, which the economists of the new enlightenment regard as more absurd, more insubstantial and unsubstantiated, than the claim that the timidity of investment capital under the impact of political fears has been a significant factor in causing the low rate of new investment of the past six years or so. The capitalist, they agree, is a timid beast, but they assert that it is only the risk of loss he is really timid about. He invests, they say, when he sees a clear chance of profit, and hoards when he doesn't, regardless of whether the

government of the day is stroking his fur or barking at him. They point out that the annual volume of new investment was even smaller in 1931 and 1932 than in any year since 1933, although if in these earlier years political shadows were being cast on the security of investment they could not have been more than mere foreshadowings of prospective shadows. They cite also the substantial recovery of the new investment level in 1936-37, when capital was still insisting that it was scared. They have even produced a statistical proof that "confidence" has nothing to do with the volume of investment, which takes the form of a demonstration that the rate of investment is so highly correlated with the rate of retail sales or of consumers' spending that no other factor need be invoked to explain its major fluctuations.

To my perhaps naïve mind, the dogma still carries some shreds of credibility, despite those weighty inductive refutations. As I understand it, the dogma is not that the degree of confidence in the intentions of government with respect to invested capital *alone* governs the rate of investment, but merely that some minimum degree of such confidence is a necessary condition of the continuance of investment at a high level. The correspondence of the rate of investment with the rate of retail sales seems at least as available to support the thesis that the rate of investment determines the level of national income, to which thesis even the most timid capitalist will happily subscribe, as to support the argument that the rate of spending of income governs the rate of investment. But the only prac- has any designs on capital, it would be wiser to bite before and bark after- tical lesson I care to draw from the possible validity of this dogma of the timidity of capital in the face of political threats is that, if government wards, if bark it must.

I hope—but do not expect—that I shall not be misunderstood as holding that full and invariably appropriate guidance for government policy under present-day conditions can be found in the old dogmas or in what could until recently be called "accepted" economic doctrine. I know no economist who would take this position, and if one were to be found I should agree that he was trying to make a fool's paradise out of his private ivory tower. My claim is much more moderate and, I hope, much more sensible. What I contend is that for various reasons, but chiefly as a psychological reaction to the impact of continued and acute depression, some economists have been discarding too indiscriminately their inherited intellectual ballast, with the result that they sway too easily with each passing wind. With apologies to you for the form in which I state my claim, I contend merely that there is life in the old dogmas yet. I concede that new light is needed and all that I ask is that our minds be kept open to acceptance, strictly and only on their merits, of both the old lights and the new.

Nor do I ask for a sympathetic hearing for the old dogmas in the belief

or desire that such a hearing would lead to a cessation or even slowing-up of the present endeavors to find remedies for prevailing evils through positive government action. Obedience to some of the old dogmas would in fact lead to an intensification of governmental action. As far as I am concerned, I have been much more impressed by the undue inertia of government in the face of acknowledged evils than by its rash venturesomeness in action; although I think I have seen both qualities displayed. It is not a middle way between action and inaction, therefore, which I urge. It has been said that throughout all the history of man Confucius alone succeeded in making the middle way either emotionally exciting or intellectually stimulating, and I have my doubts even about Confucius. As many persons who appeal to the middle way use the term, it really becomes a disguised plea that we should halt between the premises and their conclusions. That is not what I am pleading for. Let evils be dealt with, promptly and decisively. But in choosing the manner and direction of action, let us pay heed to the old as well as the new wisdom, and let us especially beware of old poisons in new bottles.

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I

ACHILLES' HEELS IN MONETARY STANDARDS

The international gold standard fell in an epidemic of Midas' disease but it was attacked through its own Achilles' heel. The attempt to maintain a fixed price for any commodity which may rise, but not fall, in money value, is, in the long run, all but hopeless. Important paper currencies were stronger than the gold currencies so long as they were kept flexible in gold value but they became at least as vulnerable as any gold currency when a relative fixity of exchange rates was sought and, still more, when a rise in their gold value was precluded and a fall regarded with equanimity or deliberately designed. A flexible exchange value of a currency, within a not very narrow zone around the "point of equilibrium," is essential to forestall the success of bear speculators and defeat of the exchange policy. The vulnerability of a currency to speculative attacks is coeval with other weaknesses in any currencies yet adopted. A money with a goods, rather than a gold, reserve offers the greatest promise not only of invulnerability but also benefaction.

The international gold standard has now, for some years, been moribund, if not dead. It is true that the United States, in somewhat unconvincing fashion, still proclaims its adhesion and allegiance to the royal metal. So far, however, as money is concerned, it is in no better state than China used to be when it had a metallic monetary standard (silver), of equal virtue with gold, maintained in isolation from the rest of the world.

For many decades the allegedly outstanding advantage of the gold standard was its international character. One or the other (or both) of the great international currencies, the pound sterling and the dollar, was always synonymous with gold, and adherence to gold therefore meant stable exchange rates against at least one of these important currencies. With the general abandonment of gold standards, the advantage of automatically stable exchange rates is now lost except, possibly, for the dollar as against the Belgian franc.[1] In purchasing power, gold has not, over a lengthy period, been more stable than silver, and it has not been as stable as a well-managed paper currency. The maintenance of a gold standard which is no longer used in the bulk of international transactions therefore involves gold-standard countries, in *equal* degree with silver or paper-using nations, in the uncertainties of exchange, and, in possibly *greater* degree, in the uncertainties of price levels. No authentic gold currency, nor any potential *bloc* of such currencies, is likely to take the former or present place of either the pound or the dollar in international transactions, so that, while present conditions continue, the dollar or any similar near-gold currency is subject to all the exchange vicissitudes which affect its neighbors. Gold has, moreover, rather less potential stability in real value than of yore. There now seems little reason, therefore, for giving gold a place, *of right,* in our monetary system.

The international gold standard fell in an epidemic of Midas' disease

[1] Exchange rates are, of course, a two-sided matter and no stability of any one currency, in gold value or anything similar, will now, of itself, provide stability in the rate of exchange against other currencies. The Belgian currency, however, is, rather uncertainly, tied to gold; and the dollar-belga rate is substantially stable.

but it was attacked through its own heel of Achilles. With the value of gold steadily rising in terms of commodities, from 1929 to 1933, every shrewd trader avoided converting gold into goods or into gold currencies (which might very probably fall, but could not rise, in gold value) and sought the opposite course of converting goods and currencies into gold. To buy goods with gold, or gold currencies, was to invite a loss of money. To hold what were, in all probability, merely *ad interim* gold currencies was likely to be still more disastrous. The result was such pressure to secure gold as made the world forget that, if man cannot live by bread alone, he has still less chance of living by gold.

Since production and trade depend upon the spending, and are paralyzed by the hoarding, of money, we were brought to the brink of economic as well as monetary collapse. So long as a true gold standard was maintained, and gold prices kept on falling, the malady of hoarding tended to persist. The hoarding of gold caused a manifold contraction in paper surrogates. Gold hoarding thus fed upon itself, the appetite grew with eating, and, as a result, our substance disappeared.

When gold first came to be used as a medium of exchange it did not differ in any fundamental way from any one of a number of similar commodities. Even so long as gold was the principal medium employed in the typical exchange of goods for money it retained most of its commodity aspects. But the establishment of gold as the *de jure* monetary standard (instead of the *de facto* standard it had originally been), and, more particularly, the growth of supplementary media of exchange, such as convertible bank notes and bank credits, gradually set up a vitally important distinction between gold and all other commodities.

Governments adopting the gold standard agreed directly or indirectly, and without any reservation as to amount, to give a fixed weight of gold per unit of convertible legal tender to all persons presenting such legal tender at the designated place of redemption.[2] The consequence was that, however great the demand for gold, its price, in the surrogates actually used as money, could not rise. When the money price of gold could not rise, while its value in terms of commodities was soaring, the note-issuing authorities were thrust into the uncomfortable position of guaranteeing to sell, at a fixed price per unit, unlimited quantities of a metal of steadily rising real value. The gold was then, in fact, rising even in money value, though the pecuniary machinery prevented this fact from coming to expression in price.[3]

[2] The redemption, in the first instance, was usually done by private banks for their own, as well as for the government, notes, and for deposit credits. This was a matter of convenience only. The ultimate responsibility lay with the central note issuing authorities whoever they might be.

[3] The distinction between "money value" and "price" is, no doubt, esoteric but it is real. Money value and price are synonymous when price is established through freely

The position was tenable so long as bank notes were practically gold certificates, with a very high percentage cover (as was substantially the case with Bank of England notes from 1844 to 1914), or so long as bank deposit credits were not used in any large measure as a medium of exchange. But, as banking in fact developed, the monetary system was put on a precarious base.

It is a commonplace that the supply of gold responds comparatively slowly to increases in its value. There is little tendency therefore toward a checking of any sudden rise in the value of gold through an early increase in output; and, as has already been noted, there is no tendency whatever, under gold standards, to check demand through a rise in price.

The greater the hoarding of gold the higher will its value ascend, especially when the redemption of surrogates for gold (whether convertible paper or bank deposits) reduces the total supply of money. The use of gold bars as monetary reserves furthers this process since the gold bars when paid out can obviously not enter the domestic monetary system. If an attempt to maintain a stable reserve ratio is made, the reduction in the total supply of money, in a partial reserve system, is extreme. Gold hoarding then has a multiple effect, augmenting the decline in velocity by a great diminution in the quantity of money. With the consequent sharp rise in the value of gold, the obligation of the guardians of a gold standard to pay it out at a fixed price constitutes a bonanza to the hoarder. If the standard can be broken, the hoarder is likely to be still further profited. Hoarding of gold, unlike that of almost any other commodity, thus tends to justify itself indefinitely, and, given sufficient impetus, to proceed without restraint until the conditions which favor it are removed by the general abandonment of the standard and the refusal to sell gold further, at a fixed price, if at all.[4]

If no question arises as to the possibility of *future* as well as present convertibility, without devaluation, of a gold-standard currency, people will, of course, be content with a paper representative in *lieu* of the gold itself. The commodity value of any convertible paper currency must of course move *pari passu* with that of gold. If both are rising, commodity purchases will tend to be eschewed, and economic life, in consequence, will languish;

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withdrawable bids and offers on a flexible price basis. The value of any commodity so bought and sold is, to both the marginal buyer and the marginal seller, substantially identical with the price established. But, with a commodity which one of the parties is bound to buy or sell in unlimited quantities at a fixed price, the money value of the commodity to *all* buyers and sellers may, in given circumstances, be either greater or less than the price at which transactions are carried on.

[4] The phenomenon is essentially that of a "corner" and "corners" are, of course, not as rare as they might be. But "corners" in ordinary commodities are dangerous to the cornerer, since rising prices tend to educe unmanageable supplies. This is not so true of gold. A closer analogy with gold is a corner in a stock, definitely limited in amount, in which there is a large short interest. The price of such a stock, in the absence of intervention, might go to almost any height.

but confidence in the currency will nevertheless prevent any great strain on the issuing institution. But when people are not sure of future, as well as present, convertibility, the drive against gold currencies becomes acute. Bear speculators are then presented with that rare, and greatly desired phenomenon, a "sure thing." They cannot lose by converting any gold currency into gold since there is not the slightest chance of *advaluation* (the *raising* of the gold content) of the currency unit while there is a very good chance indeed of devaluation or other form of decline in its power to command gold. Sure things never lack enthusiastic takers. Speculators, moreover, *as the term is here used,* are a numerous and powerful class, including, at least, such *foreign* banks as are shrewdly administered.

This is why the position of all gold currencies was shaky so long as the bulk of the world's gold was not, as now, concentrated in a single country practically unique in its adherence to gold. Such concentration, however, precludes the maintenance of an international gold standard. We are, therefore, forced to the inference that the international gold standard, as we knew it in the past, was *inherently* unstable and that, if it were ever restored in the old form, it would almost certainly fall once more. It could not stand the high liquidity preference prevailing against most currencies as well as commodities, in disturbed conditions.

In the years 1933-36 the whole impulse of the passion for gold was concentrated on France and the three or four other, much smaller, countries which were then maintaining effective gold standards. The drive against the franc was so strong that, though the Bank of France was still in possession of an enormous gold reserve, it sought to prevent a drain of gold by borrowing. To forestall the impairment of its non-earning gold asset, in exchange for interest-bearing paper, it was thus forced to the unbusinesslike course of incurring an interest-bearing liability. This act was a danger signal, promptly recognized as such, and increased the eagerness of private banks and individuals to turn their French assets into gold while the opportunity was still open to them on favorable terms. A corresponding desire for gold led holders of foreign paper currencies to bid so high for the still convertible French franc (fall of other currencies in terms of francs) that the ordinary buyers of francs for the purchase of French goods withdrew to a large extent from the market. This increased the balance of claims against French gold and, as these claims were pressed, a steady and eventually catastrophic drain of gold from France ensued in spite of all efforts to stop it. The gold standard simply could not be maintained.

Those concurrent paper currencies which were in little danger of being greatly expanded, and whose gold exchange value was considerably below the purchasing power parity level, were fundamentally much stronger than the franc, and other gold currencies, even though, or perhaps because, they were temporarily depressed by the demand for gold. The paper currencies

could rise in gold value while the gold currencies, of course, could not. Such paper currencies were therefore, at this time, more attractive to bulls than the gold units. It is true that, even where there was little or no decline in internal purchasing power, a very sizable drop below the presumptive maximum exchange value of a recently defaulted former gold currency (its nominal gold value) was necessary to induce bull speculation in sufficient volume to balance the bear pressure based on the restricted potential rise and the unlimited potential fall in the gold exchange value of the currency. But by 1934 this drop had already occurred, in the full probable measure, in the case of sterling and the dollar. These currencies were, in consequence, more or less consistently buoyant as against the franc. They might be driven, but not kept, down.

When, however, the monetary authorities in charge of a paper currency adopt a rigid policy of preventing a rise, beyond a certain figure, in its gold price[5] (or, what is the same thing, in its exchange value against gold currencies) and, still more, when their action forecasts a progressive decline, the inherent strength which the currency might otherwise possess is lost. It may, temporarily, be buoyant but it is just as vulnerable as gold. By this policy the authorities forgo an advantage over the speculator of which they might otherwise make glorious use. The policy adopted gives notice to both bulls and bears that, with the currency at or near the current maximum in its gold price, it is dangerous to buy, and safe to sell it, against gold. This is probably a factor of some importance in explaining why in 1937-1939, when sterling was, for lengthy periods, kept stable against the dollar, it was consistently heavy in contrast with the buoyancy it had earlier shown against the gold franc.

It is, of course, always possible to control a *rise* in the gold, or gold exchange, price of a paper currency by issuing—in exchange for gold—all the paper currency which is called for at that price. There is no difficulty at all, therefore, in preventing the currency from rising above a predetermined maximum. If the bull movement is very strong, large gold stocks can be acquired in this way, as they were acquired in France from 1926 to 1930, and later in England.

But, without the sale of great stocks of gold or their equivalent in foreign exchange, and sometimes even with their complete sacrifice, it is not always possible to prevent a fall in the gold price of a paper currency. To establish a maximum gold price is, therefore, to load the dice in favor of the bear speculator whenever that price is approximated. The gold price of the paper monetary unit can then move only downward, and the currency is thus thrust into the same precarious position as is inevitable to the main-

[5] This seems to have been the English policy for two or three years prior to 1937, when large quantities of gold were acquired by the British. The acquisition of this gold of course kept down the exchange value of sterling.

tenance of a gold standard with limited reserves. If, at the maximum price, the bear speculators can exhaust the reserves, or the willingness of the authorities to use them, they are bound to win, just as they win when a gold currency can no longer be maintained and its gold price falls. Losses are graciously forestalled by the official policy. So long as the policy persists, short sales can always be covered at no advance in price so that a practically costless bear speculation can be carried on indefinitely—with the ever present possibility of a break in the bear's favor. The cumulative force of this bear pressure is amply demonstrated in the repeated failures to maintain the various levels (not unduly high) set for the exchange value of the French franc from 1936 to 1939, and, in the case of sterling, in its sharp declines against the dollar, in the spring of 1935 and the autumns of 1936, 1938, and 1939.

The bear speculator in futures in a paper currency under attack is, in effect, a present hoarder of whatever reserves the monetary authorities may be using to maintain the value of the currency. It hardly seems wise to put a premium on short selling, with a correlative discount on buying, and, in the presence of a large bear interest, to seek to maintain a fixed exchange value and thus reduce to zero the speculative buying of the currency or confine it to blind purchases of small amounts by lambs about to be shorn.

The case is still stronger against a policy of progressive planned reduction of the gold value of a monetary unit. The bear speculator has then only to sell the currency short, for gold, in the confident expectation of presently buying it back at a lower gold price. He does not, in this case, need even patience. It is then very likely to be impossible for the authorities to control the pace, or extent, of the movement.

To attempt to achieve anything like absolute stability of the exchange value of a paper against a gold currency is, in unquiet times therefore, almost certain to prove a tactical blunder.[6] This is even truer of an attempt to secure a trend in a downward direction. It is much better policy to seek a loose, but not permanent, stabilization within a not too narrow zone. If the authorities are provided with a sizable stock of gold or foreign exchange and are resolute, for the time being at least, in keeping the gold or foreign exchange value of their currency from moving beyond fairly wide limits about a predetermined but unannounced norm,[7] they will have the bulls by the horns and, in other than the usual sense, the bears by the tails. They will be able to give a twist to either whenever they so desire.

If the currency rises in value, in gold or some standard foreign exchange,

[6] Where the internal purchasing power of the monetary unit is high relative to the exchange value at which stabilization is to be attempted, as was the case of the French franc in 1926, the blunder may have no serious consequences.

[7] This norm should be subject to irregular and infrequent change with the object of preserving stable internal purchasing power whenever the foreign gold, or other, currencies involved prove unstable in this respect.

above the predetermined norm, the authorities can sell it steadily but not in such volume as *immediately* to check the movement. If, on the other hand, it falls, they can similarly buy. In so doing they would make money, on both sides of the market, at the expense of speculators of undue temerity; and, on the assumption that there is an effective forward market, they could keep exchange sufficiently stable for all business purposes. The choice of the norm must, of course, be reasonably appropriate to the existing, or some desired, domestic price level. If the price level is to be changed, or if it is changing in important countries abroad, the choice of new norms should be immediate and, so far as possible, definitive, or it will be the speculators who will have the upper hand. The British have shown at times, but by no means typically, a disposition to employ their Exchange Equalization Fund in the manner proposed.

The present concentration of the bulk of the world's gold in the United States, with the steady accretion to the share of the total stock of gold domiciled in this country, has thrust upon the managing authorities of important paper currencies, whenever they elect to keep exchange rates fixed, the same difficulties which the gold currencies formerly faced. The figurative Thetis, who perhaps baptized these paper currencies in the Styx, apparently repeated the mistake of missing the immersion of the heel. Now that the value of the dollar determines the value of gold, speculation against the paper currencies hinges on the dollar rather than on gold. Except on the assumption that we shall deliberately adopt the senseless, and pernicious, procedure of still further increasing the dollar price of gold, or of denying the right to export the metal, there is no chance of gold rising in dollar value. There is, however, a very good chance that gold will fall in dollar value. This would happen if we should even falter in our practice (not legally required) of buying gold freely at a fixed price. All shrewd speculators must therefore prefer dollars to gold, and they have in fact sent us gold in stupendous volume in exchange for dollar credits. The dollar exchange value of the paper currencies, particularly sterling, was kept fixed for lengthy periods by these large shipments of gold. The British authorities have, however, felt unable to sustain the rate indefinitely and, on several occasions, bear speculators have, in consequence, been given a field day.[8]

[8] That the bears have learned to expect a break in their favor is clearly brought out in an article (Federal Reserve Board *Weekly Review of Periodicals*, Sept. 26, 1939, p. 3) reproduced from the *London Financial News* of Sept. 6, 1939. The article asserts that, on the requirement of the British Government that holders of dollars must place them at the disposal of the British Treasury, "there were abundant offerings of dollars to the authorities, since a large bull position [in dollars, that is, a bear position in sterling] was built up before the sterling rate was unpegged." . . .

Since the bears were compelled to deliver at the rate of only $4.06 to the £, they no doubt secured a good deal of "honey" in turning over dollars presumably acquired at

If, and as, the gold at the disposal of foreign monetary authorities is further greatly attenuated, the exchange value of the paper currencies against the dollar will tend to fall farther. This will increase the passion for dollars on the part of holders of other currencies. The material of present speculation—gold—is being steadily sunk in our vaults in Kentucky and, as the available free supply is thus diminished, the intensity of demand for gold, outside this country, as a means of getting dollars, is proportionately enhanced.

So long as the managers of the managed currency standards attempt to maintain a stable rate of exchange against dollars, which means a fixed price in their currencies for gold, they are thus quite as vulnerable as if they were on the former gold basis. The only solution of the problem would seem to be the adoption of the policy of reasonably flexible exchange rates with the deliberate intent of punishing noxious speculation.

The zone of fluctuation would have to be wide enough to inject in the minds of speculators a lively doubt of the intention of the managing authorities. It would sometimes be desirable to let the bears on any depreciating currency commit themselves heavily before the "control" stepped in to raise its value. The borders of the zone should therefore be not sharply defined and the zone itself should be somewhat wider than that which Mr. Keynes has espoused. Its rather indefinite limits would presumably be approached only at long intervals.

The weakness in the management of paper currencies up to the present time has been a reluctance on the part of the authorities, after a certain "equilibrium" has been achieved, to permit any substantial increase in the gold exchange value of the monetary unit they control. The constant bias is therefore toward the depreciation of such currencies against gold exchange. Except in the case of a steady appreciation in the real value of gold, this is not only undesirable on grounds of general policy but it greatly strengthens the position of the bears. A purely defensive battle against bear speculators is futile. It is not enough for the monetary authorities to attempt merely to sustain the exchange value of a currency against bear attacks. After having led the bears into a trap, by permitting the rate to fall under pressure, a strong counter-offensive should ordinarily be pursued until the exchange value of the currency has been driven somewhat above the level prevailing when the bear attacks began. If such a procedure were followed we could rather confidently expect an alleviation of the problem of short-term capital movements.

For purposes of symmetry it should here be repeated that, since a paper

about $4.70, and the volume of dollars they delivered is evidence of the difficulty of maintaining a substantially fixed rate of exchange such as had been in effect for several months. No doubt the bears felt unjustly treated in that they were not allowed to hold out for a still more luscious morsel.

currency can always, and without difficulty, be kept from rising in value, the control of possible bull speculation offers no problem. But bull speculation should not always be checked. In the inevitable vicissitudes of a (reasonably) free exchange the monetary authorities can get no help, in times of pressure, from a potentially favorable private psychology, issuing out of former bullish situations, if the effects of such bullishness on the rate of exchange have always been inhibited.

The gold standard is clearly not so sacrosanct as it once was but it still commands from Demos, and even more from Ploutos, a somewhat superstitious reverence. If, in deference to this opinion, the international gold standard is ever in any form resumed, it would seem that it also should be put on the basis of a substantial, and unannounced, spread between very partial analogues of the former gold points. It is probable that, even under the conditions prevailing before the outbreak of the present hostilities, no important country but the United States could have maintained a gold standard of the traditional type. Monetary authorities ought, in any event, to guard themselves against the type of speculator who serves no interest but his own.

It is worthy of note that in Belgium, a country which is alleged to be on the gold standard, the monetary authorities not long ago refused to issue the permits requisite for the import of gold until the exchange value of the belga had risen measurably beyond the gold-import point and the bear speculators had been duly punished by being forced to cover their commitments at a price considerably higher than they had had any reason to expect.[9] One primary feature of the traditional gold standard is rigid adherence to the letter of the contract under which it is established. Belgium, therefore, must be held to have abandoned the gold standard it was ostensibly maintaining in order to shake off the bear speculators which, under all but very quiet conditions, that standard tends to attract. The Belgian action was a tacit admission that freedom from bear speculation is more important than the standard itself and is also evidence that even a simulacrum of the old gold standard could not be maintained in Belgium unless the bears were occasionally squeezed and thus rendered a little less presumptuous.

The problems with which we have so far been dealing are largely problems of controlling the aftermath of controls. They would not be present if we had a group of pure gold standards with no surrogates for the metal in circulation. They have their domestic and their international aspects. The departure from a reasonable approximation to pure gold standards, and the introduction of controls, arose partly from inadvertence and partly from the inability to attain, or reluctance to permit, a thoroughgoing flexibility

[9] *Cf. Weekly Review of Periodicals,* Board of Governors of the Federal Reserve System, May 23, 1939, p. 7.

in our economy. On the justified assumption that the forces responsible for the situation are still effective, our present task is to secure an essential minimum of monetary flexibility in ways which will do the most good and the least harm.

So far as the domestic aspects of money are concerned, no respectable end is served by random or forced changes in the supply of money or by changes dictated merely by private, rather than the social, interest. Whether such changes occur as a result of hoarding or otherwise, they can be obviated by an irredeemable circulating medium with a 100 per cent reserve against bank deposit money. Such an irredeemable circulating medium might be provided by a pure commodity-asset currency but, in present circumstances, is more likely to be straight fiat money. Redeemable currency is always subject to breakdown and the supply cannot be effectively regulated. Such flexibility as it has is perverse. The case for an irredeemable currency on grounds of invulnerability is clear. Such a currency, whether of the asset or fiat type, would be inviolable at home.

The superiority of fiat over a commodity money lies in the ability of a central monetary authority to regulate the supply at will. This should be altered in whatever degree is necessary to offset hoarding in the widest sense of that term. The inferiority of fiat money lies in the possibility of abuse of the power of issue. All power is subject to similar abuse yet we cannot do without it on that, or any other, score. This, nevertheless, does not close the case against a commodity-asset currency provided it is pure, *i.e.*, free of anything to be "redeemed."[10]

On the international side, the great issue is fixed *versus* flexible exchange rates. It is clear that a fixed rate of exchange between any two freely vendible currencies cannot for any lengthy period be maintained unless, by accident or design, congruent monetary policies are pursued in the two countries concerned and their price levels are kept in substantially constant relationship with one another. In the absence of these conditions a relatively less desired convertible currency is certain to be successfully raided and the exchange rate broken.

A series of pure gold currencies, freely exportable, would, of course, keep national price levels in constant correspondence with one another. A currency of this type could never fall in exchange value against other gold currencies whether the latter were pure or not. But such a currency can, in effect, break down through exhaustion.

[10] The recognition of the need for an irredeemable currency explains the agreement of opinion between Professor Hayek and me on the desirability of 100 per cent reserves against bank deposits. (*Cf. Monetary Nationalism and International Stability,* F. A. von Hayek, Longmans Green, London, 1937, pp. 73 *et seq.*) On most other points we are poles apart. Professor Hayek leans toward a pure gold money while I favor a fiat currency. He is adamant for fixed exchange rates whereas they should, in my opinion, be flexible. Exchange of bank deposits for cash, under the 100 per cent reserve system, would, of course, not be redemption of any currency.

The nearest thing in modern times to a pure gold currency is perhaps the Cuban currency prior to the comparatively recent heavy coinage of silver pesos. For nearly three decades the Cubans used American paper currency as their money. This was, to them, an exact equivalent of a pure gold currency. At any time prior to 1933, they might, without any real alteration in their monetary system, have had gold, dollar for dollar, in *lieu* of the actually circulating American notes. At one time the reported circulation of these notes in Cuba was in excess of $400,000,000. This was approximately $100 per capita, a figure greatly above that prevailing in this country at the time. Yet in a very short period, and without having been supplanted by any other money, all but $25,000,000 of this sum disappeared in remittances to this country. From the point of view of internal monetary and price stability in Cuba the question may well be raised as to whether the fixed exchange rate between the more or less theoretical Cuban peso and the dollar did not ruinously facilitate the flight of currency from the island. It might have been well to have put a barrier against such flight similar to that which would be presented by a shift in exchange rates.

If it be granted that irredeemable money is desirable, such a drain of the currency as occurred in Cuba seems an effective argument against irredeemability through pure gold standards which, *inter se,* provide fixed exchange rates. Irredeemability should rather be established through fiat money (now all but universal), with abandonment of exchange rate stability.

The issue of fixed *versus* flexible exchange rates has three facets: the long term, the short term commercial, and the short term financial.

As already indicated, flexible rates in the long term are indispensable to the pursuit of anything but substantially identical monetary policies in the several countries concerned. If an international synthesis of monetary policies could now be achieved, the discussion might be confined to the general merits of fixed as against flexible rates. But, since the establishment of such a synthesis is, to say the least, dubious, and its maintenance, in the light of the situation developed in the preceding pages, still more unlikely, we must forgo the notion of permanently fixed rates as a practical probability. The only question worth discussing, then, is whether it is more desirable to maintain a provisional fixity of rates, with discontinuous alterations from time to time as the occasion demands, than to go in for continuous flexibility.

It seems unlikely that such unsettlement as would attend a policy of continuously flexible exchange rates would be as disturbing as that which is associated with the occasional shifts, of much greater magnitude, inevitable in the absence of a synthesis of national monetary policies. Flexible exchange rates would not necessarily be any more disquieting to commerce than the flexibility in commodity price relationships which we are accustomed to think essential to the proper conduct of the capitalistic system.

Even when there is no present deviation from constancy in the relationship between national price levels, the maintenance of merely provisionally stable exchange rates probably thrusts on the several national price structures a much greater readjustment to alterations in the relative international demand and supply of goods and money than is associated with a corresponding readjustment through an appropriate shift in rates of exchange.

Whether or not this is true, international short-term financial movements, quite unassociated with trade, now tend to be of such magnitude as, in many countries, to require thoroughgoing restrictions as an unsatisfactory alternative to fluctuating exchange rates.

A large part of such non-commercial, short-term, capital movements as are permitted is motivated by the knowledge (1) that a given currency is being supported in pursuit of a policy of stable exchange rates, (2) that any movement in the exchange value of that currency will be downward, (3) that it will, in any event, cost practically nothing to shift mobile assets to another currency even if, later, they are to be shifted back again, and (4) that, if the prospective alteration in exchange rates take place, such an operation will show a handsome profit. With substantially stable exchange rates it is therefore next to impossible to impose an effective damper on the speculative movement of short-term funds unless a control on the German model is instituted. If, however, the bears on a currency were presented with uncertainty rather than a sure thing, it seems probable that the pressure would be very much lightened and freedom in the exchange market could be maintained.

It is often asserted that the greatly increased volume of short-term capital movements in recent years, far from being reduced by fluctuating exchange rates, is a consequence of them. The movement of such funds was prominent, however, in the period of the resumed international gold standard, with fixed rates of exchange, from 1928-1931. The contention is therefore untenable. It is probable, nevertheless, that the volume of international short-term financial transactions would be greater under flexible exchange rates than, in fairly quiet times, under stable rates. But, though the volume would be greater, it would not be concentrated on the bear side of the market, leaving the official support isolated on the other side. With fixed exchange rates the pressure is cumulative until collapse occurs; but, with flexible rates, every point of decline in the exchange value of a currency would bring added support to it and even transfer operators from the bear to the bull side.

By some opponents of flexible exchange rates it will perhaps be alleged that while, as an alternative to more or less rigid control, flexible rates may be essential to the curbing of undesirable movements of short-term funds, they would nevertheless be so disturbing to legitimate international trade and finance as to be out of court. To this objection the reply might be given

that the choice is not between permanently fixed and fluctuating rates but between temporary stability, subject to the shock of sharp change, and a more or less even fluctuation. With flexible rates, regulatory action would, of course, still be desirable, but it would be on an entirely different principle from that hitherto unsuccessfully practised. Like the present action, however, such regulation requires stocks of gold or foreign exchange.

The forward market in exchange which would develop under truly flexible rates would, moreover, go far to eliminate business risk and at slight cost. The present forward market is crippled in that the impulse to use it at all fully arises only when the position of the currency concerned is precarious. Forward exchange operations then become a gamble on how soon the fall will occur and how great it will be when it comes. No one will offer insurance against something which is practically certain to occur, and merely uncertain as to time and amount, unless he is paid substantial premiums. But with truly fluctuating exchange rates, just as likely to move in one direction as the other, the total net cost of forward operations, to those interested only in insurance, might disappear. The gambling motive is so strong that the cost of operation of the forward market is likely to be fully borne by the gambling element when the chances of upward or downward movements in the currency concerned are even, rather than, as now, all against the maintenance of the current rate to say nothing of an advance.[11] The present high cost of forward transactions is, therefore, by no means indicative of the cost in a market where chances would be no greater one way than the other. The spread between spot and futures in such a market would, moreover, be much less than it frequently is under present conditions.

There would be occasions, of course, on a trap being set for bears, when the exchange value of the currency would for some time move predominantly downward. After some experience of the effects of the operation of the proposed policy had been gained, however, we might expect bull speculation and ordinary business buying to become active on any marked decline. This might prevent the baiting of the trap but the trap would not then be necessary. Over the long run, and presuming no such substantial change in relative national price levels as would, under any system, force an alteration of the exchange-rate status, it seems probable that freely flexible rates would give greater underlying stability than attends the attempt to maintain rigid rates, since the latter are, in fact, punctuated by sizable breaks.

The most puzzling problem of exchange-rate regulation is that of stopping panic flights from a currency without permitting such a fall in its exchange value as would be highly disruptive to the price structure of international goods and, by repercussion, even that of domestic goods. When bulls cannot be induced to venture in the market under any reason-

[11] Evidence of the validity of this statement is furnished by the fact that the public will pay to assume what is, at best, no more than an even chance in the stock market.

able stimulus, a downward movement of exchange may be so strong as to exhaust the reserves of the "control" when, after a tactical drop, the authorities attempt to reverse the direction of the movement. The only recourse would then be the introduction of rigid exchange control until the panic had subsided. Such control would, of course, be still more necessary if an effort were made to keep rates stable—unless confidence could thus be revived before a break occurred. To prevent the occurrence of panics, large reserves are in any event desirable; and, to secure such reserves, it might be necessary to keep the exchange value of the currency for some time below "equilibrium" level.

Under the system of freely flexible rates the monetary authorities would presumably enter the market only when the deviations from the current "par," or norm, had, in their view, become excessive. Since the potential profit on bull speculation would at times be large there would not, as there is now, be any stronger tendency toward private bear than bull operations. Private speculation, within the broadened and somewhat indefinite zone of free fluctuation, would then exert nothing but a beneficent influence, just as it did in quiet times under the international gold standard; and intervention by the authorities would, in consequence, be unnecessary.

The proposed system would, of course, not give anything approaching stability of purchasing power to the monetary unit in any country—without an occasional shift in the norm of exchange rates against gold currencies whenever the real value of gold tended to alter. To secure substantial stability of the value of money, a monetary unit representative of a varying weight of gold seems likely to be the most effective instrument.[12] If the price of gold is kept unchanged when, in the absence of arbitrary fixation, its price would alter, the task of currency management becomes very onerous. It is likely to involve, on the one hand, such a depletion of gold reserves as to lead to a breakdown of the standard, or, on the other, to such a cumulative plethora of reserves as to be prohibitively expensive. There seems to be no reason to add to the necessary difficulties of monetary management the quite gratuitous task of managing gold so as to keep its value, and its price, at any desired level. There would, by contrast, be no need for any attempt to manage the value of gold, even where it was an element in the monetary system, provided there was no reluctance toward changing its price.

Foreign exchange rates against gold currencies of the traditional type would, of course, change in rough proportion to the change in the weight of gold in any such monetary unit, or in the paper currency price of gold; and the zone of exchange fluctuations would move as a whole. But since no large change need be made at any one time, exchange rate norms, even after

[12] A monetary unit, that is, of the type made familiar by the early work of Irving Fisher in this field. In the absence of any right of gold to enter circulation, the same effect can be achieved by merely varying the official quotation of gold. So far as its real value is stable, sterling is such a currency.

the shift in the weight of gold in the unit or in the price of gold, would tend to settle somewhere within, but toward the margin of, the preëxisting zone. Speculative operations would merely anticipate the change and so reduce its magnitude. If, *e.g.*, a decrease in the amount of gold represented by the dollar, but not by sterling, were anticipated, forward speculators would no doubt sell dollars forward against pounds. If they carried this very far, however, they would so drive down the sterling value of the dollar, within the then current zone of fluctuation, that, after the anticipated change in the gold "content" of the dollar had been made and purchases of dollars to cover the forward contrasts were in order, the sterling price of dollars might well rise so fast that most speculators would be unable to regain as many dollars with their pounds as they had laid out in the purchase of the sterling. This could readily happen in spite of the fact that the "gold content" of the dollar, at the norm, had been diminished. The speculators, moreover, could not "contract out" of exchange rate fluctuations by moving into gold, since they should not, at any time, be able to obtain gold from the monetary authorities at the same price at which they could currently sell it to them. Speculation would thus be held within beneficent bounds.

There would, moreover, be no general tendency to disturb foreign-trade relations. Movements in gold price levels tend to occur more or less synchronously, and in the same direction, in all gold-standard countries. If the movement were upward, and the amount of gold in the compensated monetary unit were therefore increased, the price level in the country of the compensated unit would tend to remain stable while it was rising in other countries. The greater foreign exchange value of the compensated unit would then enable the country in question to obtain imports, selling at higher prices in foreign currencies, at stable prices in its own monetary unit; while its exports, stable in price in the home market, would, as a result of the shift in exchange rates, sell abroad at the higher prices which would correspond with the generally higher price level in the respective foreign currencies, which would then prevail.

It would be illusory to suppose, of course, that the price level in a country of compensated currency would respond immediately and proportionately to shifts in the gold content of the monetary unit. This notion, if ever widely held, has been exploded by the monetary experience of this country since 1933. With a given volume of trade, the price level can so respond only as a result of presumptively slow changes in the supply of monetary units, or in the rate of monetary turnover, or both. The speed of turnover, in short periods at any rate, is determined by psychological factors of an unpredictable sort. The type of currency suggested is therefore fitted to iron out the longer trend in prices rather than directly to affect cyclical fluctuations.

If, however, exchange rate norms were seldom altered until after an apparently definitive change in relative national price levels was actually in

progress, and, eventually, in strict proportion to the change, there would be little question of unfair competiton in international trade. It would be neither easier nor harder for any country to sell, or buy, in any other than was the case with the fixed exchange rates, and the more or less steady relationship between price levels, which marked the international gold standard. Exchange rate movements would, in fact, compensate the shift in relative national price *levels,* with the prices of individual commodities varying from the average as they always have.

Without making any such claims to precision in price adjustment as have sometimes been advanced for similar systems, this system would probably meet the "needs of trade," at a given price level, with exchange rates which would fluctuate, in any short period, within the limits of nothing more than a tolerably spacious zone. A given gold base would support a larger or smaller monetary and credit structure, according as the monetary unit contained less or more gold (gold was priced high or low). The currency would thus be given the protection which comes from a linkage with gold; but the price level would not be tied to the vagaries in the real value of that metal.

On the assumption that our reserves are gold, rather than dollars, the present embarrassment of riches in gold in this country, and the difficulty about excess reserves of the commercial banks, would be alleviated by a non-definitive downward revaluation of our gold stocks (more gold to the dollar or, what is the same thing, less dollars to the ounce of gold). This revaluation would not require the acknowledgment of any permanent accounting loss on the existing gold stock since we could always at a later date make the gold worth in dollars whatever we wanted it to be. Gold would, so to speak, be made a "stock without par value." Since there are practically no gold standards left in the foreign world, the revaluation of gold in dollars would not necessarily, or even probably, cause a material alteration in any important exchange rates; and, since the price of gold would be reduced, the present pernicious stimulus to gold mining, which is complicating an already awkward situation, would be removed.[13]

If gold like other commodities, instead of being offered at a fixed rate, should be suffered to rise in money price as the demand for it increased, and if, instead of being later salable at a fixed or increased rate according as the gold standard was or was not maintained, it should meet a falling market when dishoarding occurred, we should have done something to render a gold monetary system less vulnerable, and more useful, than it now is. Hoarding, which is not inherently sinful and has its validity, should be permitted if the social welfare can at the same time be preserved. Dishoarding, which is sometimes too readily welcomed, should, on the other

[13] The many facets of the general proposal cannot here be reviewed but it may be said that the difficulties are not nearly so great as they will appear to "conservatives."

hand, be deprived of its power to induce inflations. A variable price of gold would go far toward realizing these ends.

The advantages of the system proposed, however, are largely negative so far as hoarding is concerned and would, at best, make it innocuous. It is possible, nevertheless, that properly controlled hoarding and dishoarding of money might be made a positive factor in stabilizing economic activity. Gold is advocable as money only because of our gross ineptitude in pecuniary matters. Over and over again, in history, we have sought, by way of debt money, to improve on gold; but lack of capacity long to handle with any prudence an outright debt money has forced a reversion to a standard which is satisfactory only in default of a better. If, however, our lack of rectitude in pecuniary matters compels us to have an asset money, the clear logic of the situation is to set up a type of asset money which will promote a stable economic activity rather than one which thrusts our economy into a malaria of alternate chills and fevers with more or less persistent lassitude.

A more ideal, and perhaps a more feasible, money of this type than gold could ever be, has been recently proposed, with elaborate detail, by Mr. Benjamin Graham.[14] His proposal deserves the most serious consideration. He suggests, in effect, that 100 per cent monetary reserves be held in the form of a wide range of storable commodities, deliverable to and by the central bank, in composite units at a fixed price in money. Whenever the preference for liquidity in the community waxed, and prices tended to fall, arbitrageurs would be impelled to deliver the composite commodity units to the central bank in exchange for their fixed value in money. Production would thus be spontaneously maintained over a wide field of economic activity instead of being somewhat stimulated in the single narrow field of gold mining and retarded everywhere else. Whenever, on the other hand, the preference for liquidity in the community waned, and prices tended to rise, inflation would be forestalled by the redemption of money in the composite of commodities held as reserves by the banks. Over-investment in specific lines would, moreover, be avoided by the maintenance of general price stability.

This, one can assert with some confidence, is a theoretically desirable form of money and the only significant question is that of practicability. It is to be noted that Sweden, which was the first, if not the only, country to alter the price of gold to check a "gold inflation" and to acquire goods rather than gold, appears to be maintaining its leadership in emancipation from outworn pecuniary tradition by the use of commodities other than the precious metals as a monetary reserve. This may well be the first step in a revolution in monetary practice which could eventually render our pecuniary systems not only invulnerable but benign.

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[14] *Cf. Storage and Stability,* McGraw-Hill, New York, 1937.

MONOPOLY ELEMENTS IN RENT

The concept of land ownership as a monopoly is old, but it reappears in new and altered form in Professor Edward Chamberlin's theory that urban rent is a purely monopoly income, while agricultural rent is purely competitive. This theory, based on a confusion of the markets for *retail goods* and *agricultural products,* on the one hand, and the markets for *retail sites* and *farm lands,* on the other, seems definitely invalid. The markets for both retail sites and farm lands are imperfectly competitive; and the rent, in both cases, is an imperfectly competitive return.

Land ownership has often been referred to as a monopoly. Adam Smith's well known dictum that "the rent of land . . . is naturally a monopoly price" was followed, in some cases with modifications, by Malthus, Senior, J. S. Mill, Henry George, and by a few recent economists. This doctrine has not hitherto met general acceptance, but Professor Chamberlin has recently given it new prestige in his *Theory of Monopolistic Competition* in which he has formulated the novel theory, that while agricultural rent is a purely competitive return, urban rent is a "pure monopoly return."[1]

Professor Chamberlin finds many differences between agricultural land and urban land, and between agricultural rent and urban rent. He contends that a business site confers no advantages analogous to superior fertility in agricultural rent; that one site "is capable of *producing* as large a quantity of retailing services as another—there are no differences in fertility and no scarcity whatever of the best land in this respect"; that marginal and submarginal land anywhere—practically free land—is as "fertile for selling purposes" as the best shopping site in New York City. Urban rent, which is entirely location rent, is quite different even from location rent of farm land; for the location rent of farm land is due to differences in the cost of transportation to the market, but the urban land "carries its market with it." The market for agricultural products is purely competitive, allowance being made for differences in transportation costs; there are many buyers and sellers, as required for pure competition, and any seller can dispose of an indefinitely large amount of product at the prevailing price. "The retail market, on the other hand, contains monopoly elements, for the factor of convenience differentiates the product spatially." Since buyers do not move about with entire freedom, the owner of any particularly convenient site, according to Professor Chamberlin, has a monopoly of the use of the site, and receives a monopoly rent. His site affords a market which is, to a degree, distinct from the whole; and the amount of product he can dispose of at the prevailing price is not indefinitely large—as in pure competition.

It is not difficult to agree with much of Professor Chamberlin's argument. It is quite true that the advantages afforded by good business sites are different in some respects from those afforded by good land; that low-rent sites

[1] Third ed., pp. 112, 113, and Appendix D. Professor Chamberlin considers only the rent of agricultural land and of urban land devoted to retailing.

are not poorer than high-rent sites in the same sense that marginal agricultural land is poorer than good agricultural land; that the owner of a particularly convenient urban site is a monopolist with respect to his own site, to the extent that it is differentiated from all other sites. For reasons that will presently appear, we may concede that the rent of urban land *may* include a more important element of monopoly than that of agricultural land; but even this is doubtful.

Much of Professor Chamberlin's analysis seems, nevertheless, to be unsound, and his general conclusions entirely invalid. Throughout his analysis there is a confusion of the market for *products* of land and the market for the *land itself*. He is concerned with the differences between the farm *business* and the retail *business,* and with the differences between the pricing process for *farm products,* as contrasted with *retail goods*. As in his general theory of imperfect competition, he states that the market for farm products is purely competitive, while the market for retail goods is imperfectly competitive; and apparently from this he proceeds to the conclusion that the market is perfectly competitive for agricultural land, and imperfectly competitive or purely monopolistic for urban sites. (Just how he proceeds to the conclusion that urban rents represent "*pure* monopoly," the writer is unable to make out; and he is also unable to understand how there could be any pure monopoly.) In Professor Chamberlin's analysis little attention is given to the *land market,* in which rents are determined.

His conclusions, even as to the *products* markets, seem to the writer to be only partially valid. There is clearly an error in the first assumption here—in the assumption that the market for farm products is purely competitive. The markets for such staple commodities as wheat, cotton and corn approximate this fairly well, yet with important qualifications. If we think of the wheat market, for instance, as the place where the farmer sells his wheat, there is of course a strong taint of monopsony, or duopsony, or perhaps of oligopsony, in the market; for there is often only one elevator, and there are seldom more than two or three, within easy hauling distance. At one time the grain elevator was one of the mid-West farmer's most hated monopolies. This would not be the ordinary conception of a market, to be sure; but when we turn to the grain exchange we find again that the picture of perfect competition does not fit the facts. Standardization of wheat is not perfect, for there are some variations in quality within a given market grade. Millers do not buy wheat of a given grade indiscriminately, but, for at least a part of their needs, buy only after inspection and testing. Such other farm products as tobacco, fruit, livestock, poultry, eggs, milk, butter and cheese are by no means so standardized as to meet the requirements of a perfectly competitive market. There are, furthermore, definite elements of monopoly in the markets for agricultural products: on the demand side, for tobacco, livestock, flax, often for milk and some other products; and on

the supply side, for some kinds of fruits and nuts, and sometimes for milk. Even where there are many producers and many consumers, there are often monopolistic elements in the middleman's functions.[2]

In his discussion of the retail business, Professor Chamberlin comes to even more questionable conclusions. The statement that "urban rent arises from the products of lands of the *same* grade being sold in *different* markets" raises two questions: a minor one, to stress which would be cavilling—why "the products of land of the *same* grade?" It seems obvious that the products of lands of *all* grades are mixed beyond possibility of identification. A more important question arises from the assumption that different retailing sites are *different markets.* To the extent that they are really different markets, the retailer on each site would be a monopolist; yet his store could scarcely be called a "market," as economists use that term, any more than could the local elevator at which the farmer sells his grain.

Much of the discussion of "spatial monopoly" in recent economic literature stresses too much the monopoly element in retailing. It is true, as Professor Chamberlin states, that the advantages afforded by different sites "are dependent only in part on relative volume of business," that "other factors are the prices which can be charged, and the type of business which can best be conducted on the location." The demand curve for goods sold on any site is not a horizontal line, but slopes negatively. The retailer on such a site can mark his goods at various different prices, and sell different amounts of goods; and presumably, like any seller under imperfect competition, he will fix his prices at the point which will yield him maximum net revenue. Yet various considerations indicate that the slope of the demand curve is not very steep, and that competition and not monopoly should be stressed here.

In the first place, although different stores, and different sections of the shopping area, appeal to different classes of people, offering different qualities of goods and grades of service, quality of goods and service considered, prices cannot vary much. Logic would suggest that they might be higher on the high-rent sites, where the greater crowds are, and where therefore the demand curve should have the steepest slope; yet there is certainly no evidence that prices are higher on these sites. Operators here evidently think of their advantages mainly or entirely in terms of volume rather than price. Anyone who observes shoppers flitting from one store to another will get the impression that prices charged on different sites are given rather careful scrutiny. This scrutiny is likely to be effective with respect to the many branded and perfectly standardized goods sold at retail.

A second consideration indicating that the slope of the demand curve

[2] On the monopolistic elements in agricultural markets the writer has used a study on *Monopsony and Monopsonistic Markets,* by Mr. Ross Robertson, of the department of economics at Kansas.

facing the operator on a high rent site does not slope much, and that competition should be stressed rather than monopoly, appears when we analyze the crowds of shoppers who are responsible for high rents. Professor Chamberlin, like many other writers on this subject, seems to assume that these crowds just *happen to be* in the high-rent shopping districts. To some extent this is true. To some extent, the large crowds are there because of immobility, or because they are "impeded" in their movements. The proximity of hotels, the confluence of street-car lines, perhaps many other factors, may mean that there are considerable numbers of buyers here, although these in turn may be here because there are good stores in the neighborhood. That the location of the shopping district of a city is to some extent determined by the distribution of the population through the city is indicated by the fact that shifts in the distribution of population usually bring shifts in the retailing districts. To some extent, the buyers do *happen to be* there, and the operator on a site faces a negatively sloping demand for the products sold there which will enable him to exploit them through higher prices than those generally prevailing on inferior sites. He may take advantage of the fact that they are "impeded" in their movements.

But to some extent buyers *come* there, *overcome* their "impediments" in order to be there, presumably because they find there advantages in the price of goods—or in the quality, or service, or selection available, which are dimensions of the price; and to that extent it is clear that the operators on expensive sites face a demand curve which, within the limits set by the rationality of buyers, is horizontal. They induce people to *come* by offering prices at least as low as those of competing sellers on less expensive sites, and their advantage over the sellers on poorer sites—the advantage for which they pay high rents—is measured largely, if not entirely, in terms of volume of business. The division of the retailing area of a city into different markets, while interesting in its theoretical aspects, offers a distorted and unreal picture of the retail business.

The statement that "there is no extensive margin in urban site rent" is consistent with Professor Chamberlin's theory that urban sites yielding different rents are really different markets. He argues that the costs of producing on low-rent sites are not higher—as they would be on marginal agricultural land—but rather that "the market they afford is smaller." Here there is apparent unwillingness to recognize urban uses as proper uses of land. Urban land "produces" only in the sense of affording "buyer contacts"; and the low-rent sites afford fewer buyer contacts than the high-rent sites—just as marginal agricultural land produces smaller crops in proportion to the amount of labor and capital employed. Just as a given amount of labor and capital will yield more produce on good agricultural land than on marginal land, so will a given amount of labor and capital yield more mar-

keting services on "good" urban land than on "poor" land. Just as increased demand for farm products leads to an outward shift of the extensive margin and more intensive use of the superior land, so does an increased demand for retailing services lead to a shift at both points. Marginal agricultural land is land that will produce barely enough products to pay cost of production; and surely there is logic in saying that marginal urban sites are sites which yield barely enough business to pay costs, including no rent. Or, if we must be meticulous, we may say that marginal land, in both cases, must pay a small rent, to turn it from the next lowest use.

Turning now to the *land market* and the rent of agricultural and urban land, we find a similarly inaccurate picture. There is no necessary connection between the products market and the land market, as far as monopoly is concerned, in either agricultural or urban lands. Monopolistic or monopsonistic elements in the market for a farm product may not affect the land market at all. If the tobacco manufacturing industry were highly competitive, the market for tobacco land would be no more competitive than it now is. Coöperative monopolies in the marketing of some kinds of fruits do not generally affect the land markets in any way. The market for farm products, on the other hand, might conceivably be purely competitive, and the land market highly monopolistic. This would be true, for instance, if a single land owner owned all the corn land, and rented it to a hundred thousand farmers. It is possible to conceive of a situation, similarly, where a single monopolist owner might own all the land in a city, yet the retail business would be as competitive as it is now. In such cities as Gary and Pullman, such a situation exists. Any city which socialized its land would be a monopolist owner of business sites; but such socialization would not affect rents or the retail business in any way, unless the city held some land out of use. Much of Professor Chamberlin's discussion of the markets for farm products and retail goods seems irrelevant to the problem of rent.

It is true that a city is a peculiar institution, in its relation to land. From one point of view, it appears that most of the people are there because the others are there, for the purpose of transacting business of various kinds; yet there is usually a fundamental geographic basis for the location of cities, and for the "market productivity" of urban sites, a basis analogous to the fertility of good agricultural land. The unequalled harbor of New York City, the river junctions at Kansas City and St. Louis, the lake site of Chicago, are such geographic bases, and the land near such strategic geographic points is highly productive of marketing facilities—of "buyer contacts"—somewhat as good agricultural land is productive of crops. Professor Chamberlin states that "urban land carries its market with it," but perhaps it would be more accurate to say that it *is* a market, as far as it is devoted to retailing. This calls for congestion, and at points of maximum congestion,

for very high rent; while there is never a scarcity of land beyond the fringe of urban use.

Much of Professor Chamberlin's analysis of urban rent seems confused:

If entrance to every portion of a retail field were unimpeded, there would be no differences in the rents paid throughout. The impediment of land scarcity where customers are most numerous and opportunities for profit therefore greatest gives larger returns at some locations than at others—returns which cannot be reduced by other sellers moving in to share them.[3]

The idea seems to be that since retailers are "impeded" in their efforts to engage in business on the scarce, high-rent sites, those who have the use of the sites make monopoly profits, which competition forces them to turn over to the land owners, as "monopoly returns." Elsewhere Professor Chamberlin notes that the buyers are also "impeded," and with the same results:

The movements of buyers being impeded, the "product" of each site contains an element of convenience to a certain group, and the seller locating on the site has a monopoly of its product, the full value of which he is obliged by the competition of others for its use to pay into the hands of the landlord. If buyers moved freely over the entire area, as they would if the market were a purely competitive one, the differences in urban rent, and in land values would entirely disappear.[4]

In other words, sellers and buyers—not of urban lands but of the products sold on urban lands—do not move about with perfect freedom and therefore the entire retail area of the city is not a single competitive market, but a number of separate monopolistic markets. As an analysis of the market for *goods,* this seems sound, although exaggerated; but the conclusions as to rent do not follow. Suppose sellers had free access to the high-rent land, and as many as wished to could use such sites, rent would be equalized only in the sense that it would disappear, just as agricultural rent would disappear if an indefinitely large number of farmers could produce an indefinitely large amount of farm produce on the best farm in Iowa. Such a situation would simply mean that the law of diminishing returns was no longer in operation, and of course rent would no longer be paid. What would happen if buyers—of goods—moved freely over the entire retail area is difficult to decide definitely, but it seems likely that rents would fall greatly; yet some rent would still be paid, and slight rent differences would persist. Complete mobility in buyers would *tend to* eliminate rents, for if buyers could move freely over the entire retail area they could presumably move farther, and cause the retail area to expand to a point where rents would *nearly* vanish. Retailers on no-rent sites would be able to get as much business as those paying rents, and, with consequently lower costs, could pull business to the margin, which would shift outward until rents approached zero. Some rent, and differences in rent, would remain, however,

[3] *Theory of Monopolistic Competition,* 3rd ed., p. 112.
[4] *Ibid.,* p. 215.

because of the immobility of *goods*. It would cost something to haul goods from terminals to the stores, and since this cost would be slightly greater for longer distances, the sites near the sources of supply would command rents equal to the differences in the cost of hauling. If rents are to be reduced to equality, or eliminated, there must be perfect mobility of both people and goods; but, as a matter of fact, if there were such mobility in both, there would remain only two reasons for the existence of cities: some people might prefer to live gregariously, and many would want access to city utilities.

All this, however, seems to be little more than begging the question. Urban rents are entirely, or almost entirely, location rents; and location rents are based largely on immobility of people or goods. Even the location rent of farms is based on the immobility of crops—the cost of transportation—or on the immobility of people, and would disappear if there were perfect mobility of both.

In all this discussion of the immobility of buyers and sellers, there is no mention of the immobility of *land*, which is far more important in the problem of rent. If the low-rent *land* could be moved to the high-rent locations, and could be stacked up there advantageously—as capital is—then indeed rents would be equalized, or eliminated; but land cannot be handled so.

Professor Chamberlin insists that there is no extensive margin in urban site rent:

> This concept has to do with a situation where the product of lands of *different* grades is sold in the *same* market, whereas urban rent arises from the products of lands of the *same* grade being sold in *different* markets. Low-rent sites are not poorer sites in the same sense that marginal land is poorer than the best agricultural land. The costs of producing on them are not higher; rather, the market they afford is smaller. Two sites have different rents to the degree that they are in different markets, and to exactly this same degree the concept of an extensive margin is meaningless as applied to them.

It is quite true that the extensive margin in urban site rent is a different sort of concept than the extensive agricultural margin; that low-rent sites "are not poorer sites in the same sense that marginal land is poorer than the best agricultural land"; but what of it? We might as logically reverse this, and say that "marginal agricultural land is not poorer than good land in the same sense that low-rent urban sites are poorer than high-rent sites." In the city, land is used for a different purpose—for the transaction of business, instead of crop production. It "produces" by providing access to the city crowds, by providing buyer contacts, rather than by growing corn or wheat; it affords "standing room" rather than fertility: but its services are quite as essential as the services of farm land. Indeed it is in its urban uses that we see most clearly the fundamental attribute of land, which, as Marshall points out, is "extension." In its extension, land is most definitely

a peculiar factor, most definitely a gift of nature, unalterable by man. Urban rent is easier to separate from other forms of income than agricultural rent, and for many purposes serves better as an example of economic rent.[5]

The truth appears to be that, with respect to monopolistic elements, there is no clear distinction between agricultural and urban rents. The land itself, in its physical aspects, is generally the same in both uses. The land on Manhattan Island could be used for agricultural purposes, if that were the most profitable use; and any farm land could be used for retailing, if it were taken into a city. There are of course other uses to which any land could be put if conditions warranted: urban residence, manufacturing, wholesaling, forestry, or recreation. No matter what the use, the rent (or price) of the land may be explained on the common principle of supply and demand—not for the products or services of the land, but for the land itself.

Since Professor Chamberlin is concerned mainly with the goods market, rather than the land market, he does not take pains to indicate clearly what is his conception of rent—whether he thinks of it as a differential surplus, of products or of buyer contacts, or as a money payment; but apparently he believes that even for urban land, the money payment equals the economic rent, and that the entrepreneurs pay the land owners the amount of the economic rent. At any rate he states:

> Competition among entrepreneurs to secure these monopoly gains is the force which puts them into the hands of the landlords. . . . The differential remaining (above profits) which is due to the superiority of the profit-making opportunities afforded by one site as compared to another, is rent, and is put into the hands of the landlords by the competition of entrepreneurs for the best opportunities.

There is no hint here of any monopolistic interference in the *land* market, no hint that it is not a perfectly competitive market. In fact, if the owner of an urban site can get, and must accept, for the use of his site a sum just equal to its productivity, in what respect is his market situation different from that of a farmer selling wheat? He has no more control over his price than has the farmer.

This point may be elaborated a little. The demand for retailing sites is of course a derived demand, derived from the demand for the advantages to be gained from the use of the land, advantages in the *number* and *quality* of consumer contacts—quality referring to the possibility of selling at high prices. Apparently the entrepreneur lessee, as Professor Chamberlin concedes, must pay the land owner just what those advantages are worth. If so, have we not an approximation of a perfectly standardized commodity, and a *purely* competitive market? In renting a site, the lessee is buying consumer

[5] This classic discussion of the differences between agricultural and urban rents is to be found in Von Wieser's "Die Theorie der Städtischen Grundrente," published in 1909, as an introduction to Mildschuh's *Mietzinse und Bodenwerte in Prague,* and reprinted in 1929 in Von Wieser's *Gesammelte Abhandlungen.* The writer ventures no elaboration of Von Wieser's views, but wishes merely to offer an argument against the notion that urban rents represent pure monopoly and agricultural rents pure competition.

contacts, and paying for them at a certain rate, much as if he were buying unstandardized gasoline and paying for it according to its propulsive power. If there are many sites available, although completely heterogeneous, and many bidders for sites, have we not the essentials of perfect competition? When we buy homogeneous gasoline at a certain price per gallon, we have the standardization essential to perfect competition; and if we buy heterogeneous gasoline at a certain price per unit of power in it, is that not essentially the same thing? The bidder in the retail land market may have a sentimental preference for a certain site; he may want to be in a certain general neighborhood for his particular kind of business; he may want a "grade" of site proportioned to his "grade" of abilities: but, aside from such considerations, it should make little difference to him which site he gets, since he must pay in proportion to the number and quality of customer contacts that go with it. Any site, provided that it fits the specifications mentioned, is about as good as any other; any site, within the limits suggested, is an almost perfect substitute for any other. From this point of view, since there are many buyers and a considerable number of sites, the retail land market would appear to approximate perfect competition.

The urban land market being thus, in effect, almost purely competitive, how does urban rent become a pure monopoly return? Apparently from the fact that the retailing business conducted on the site is imperfectly competitive: "The amount of product each seller can dispose of is not indefinitely large at the prevailing price. . . . Spatial differentiation results in demand curves for the goods of individual sellers which have a negative slope instead of being perfectly horizontal." The monopoly elements in the retailing business reflect back on the land and make the rent monopolistic; although it was the "spatial differentiation"—due to land—which made the retailing business monopolistic in the first place. There is a strong suggestion of circular reasoning here, and much of the reasoning can hardly be reconciled with the assumption that the land owners receive money incomes which measure economic rent accurately.

Defining rent as the money payment made for the use of the land, in order to square it with the general price analysis, let us consider further Professor Chamberlin's distinction between agricultural and urban rent. It is clear that agricultural rent is not a purely competitive return as he would have it, and urban rent is not a purely monopolistic return; but, on the contrary, both are examples of imperfectly competitive price. While the "buyers and sellers"—lessees and lessors—of agricultural land are numerous enough in the aggregate to make a competitive market, agricultural land is by no means homogeneous, but varies greatly as to climate, fertility, location and suitability for producing different crops. The agricultural area of the country, furthermore, is divided into many local areas which to some extent represent distinct and separate markets *for the renting of the land,* just as, according to Professor Chamberlin, the land area of a city does. In these

local areas the number of renters and farms to rent may not be very large, and rents may not represent anything even approximating competitive price. Still other factors prevent any very precise adjustment of agricultural rents: the heterogeneity in the dispositions of land owners, who differ considerably in the zeal with which they pursue their own financial interests; and a similar heterogeneity in the dispositions of tenants, with respect, not only to their ability as farmers but also their reliability in paying the rent. Other factors of similar significence are the fact that rent is often paid in kind, rather than in money, and the fact that a farm is not only a productive agent but a home as well, and therefore not subject entirely to business calculations. For all these reasons, farm rent does not conform to the law of one price, but, even for land of similar fertility and location, may vary.

The number of retail sites is of course smaller than the number of farms, and the sites are more heterogeneous with respect to their productive value—varying from almost nothing to the fantastic values on Wall Street—and perhaps also with respect to their uses; yet the number of sites suitable to most uses is so large that no owner could affect the rent much by withholding his land from use, and the number of demanders is so large that no one of them has much influence on the rent. The appraisal of these sites is fairly precise, probably more precise than the appraisal of farms. Their rents are determined in a market where the buyers and sellers are doubtless shrewder than farmers, and where purely business considerations operate, for business sites are not used as homes. On the whole, it is not certain that the market for urban sites is more monopolistic than that for farm lands.

There is a sense in which, indeed, the owner of a business site is a monopolist, and his rent pure monopoly; but it is not the sense in which urban rents should be considered. The owner of the site is a monopolist in his ownership and control of his site, if we consider only this one site. But the renting of a single urban site scarcely suggests a market, in a true sense. Where there are a number of bidders for the site, the transaction resembles an auction, with only one thing to sell. To picture a true market we should have to consider more than a single sale as being made, bringing in competing sites; and when we do so we see that the site has its substitutes, like any other commodity sold in an imperfectly competitive market, and that the price or rent represents an imperfectly competitive return.

Yet our conclusion as to the monopolistic character of urban rent will depend on our conception of the fundamental characteristics of monopoly.[6] If we think of monopoly as control over supply, the urban land owner is a monopolist, to the extent that his site differs from other sites; but so then is almost every owner of a product of nature, for nature emphasizes heterogeneity. Man is the standardizer. If we adopt this concept of monopoly, every farm owner is a monopolist, for every farm differs from every other

[6] See C. J. Foreman, "Theories and Tests of Monopoly Control," *Am. Econ. Rev.*, Sept., 1919, pp. 482-501.

in some respects; every owner of a residence site, or a factory site or mine, is a monopolist; every business-man of unusual abilities, every unusually able actor, actress, musician, singer, entertainer, doctor, lawyer, painter, writer, journalist and teacher; every artisan, mechanic, or taxi driver of exceptional ability or integrity. Every one of these has qualities slightly different from those of others of his class, and to that extent is a monopolist. But we may say, further, that every man, woman, or child, regardless of abilities, differs from every other, and is therefore also a monopolist. We may go even further. As any horse trader knows, every horse is unlike every other, in physical resources or in disposition, and cattle are far from homogeneous. The owners of such animals are presumably monopolists. The category extends even to many man-made goods. The writer's 1928 Franklin car is now definitely unlike any other car on the roads, and much of his hand-made furniture is quite unique; so he is a monopolist too—on several scores.[7]

Such a concept of monopoly has no great social significance, and does not suggest the anti-social character of monopoly. We may well regret that there are not a thousand Marian Andersons, a million Edward Filenes, and an unlimited supply of the best agricultural land and the most favorably located urban sites; but nature and not these "monopolists" is responsible for the limitation. A monopoly suit in such cases would have to be directed against nature, and not against men. We may favor heavy taxation of the incomes of the owners of such resources; but we should do so because such resources are largely unearned gifts of nature, rather than because they yield monopoly incomes.

If, on the other hand, we assume that the fundamental characteristic—or shall we say effect?—of monopoly is a restriction of production and an increase in price to the consumer, a characteristic constantly emphasized in Professor Chamberlin's writing, then urban rent has few of the earmarks of monopoly. The owner faces no negatively sloping demand curve for his land; he cannot consider withholding part of his site from the market, in order to lease the rest at a higher figure; he cannot restrict the use of his site, but, on the contrary, the higher his rent, the more stories will be built on it—the more intensively it will be used—and the more services it will render; his rent is not made by reducing services and raising prices to the consuming public. He must usually offer his land in competition with a considerable number of other owners of sites of about equal productive value; he must take as rent what he can get, as fixed by demand, by the supply of competing sites, and to some extent, perhaps, by higgling and bargaining. If his site is strategically located, it is even well that it should command a high rent, for that tends to insure its use by an able entrepreneur. It is unfortunate that such sites are not owned by the public, but since they are not, some one must own them, and in doing so they do not raise many of the problems directly connected with monopoly.

[7] See *The Theory of Monopolistic Competition*, 3rd ed., p. 112.

Somewhat the same reasoning applies to the other incomes which Professor Chamberlin classifies as monopoly returns—the incomes of men and women of unusual reputation, skill or ability. The able business-man commands a high income, which is in a sense a monopoly income, yet he does not, like the ordinary noxious variety of monopolist, characteristically skimp in the use of his monopoly abilities, but on the contrary is likely to work hard, to use his talents lavishly. The great singer, offering his services in installments at each concert, does indeed face a negatively sloping demand curve, and may choose to sing less—perhaps only in the larger cities—at higher admission charges; yet on the other hand he is likely to find that the oftener he sings the wider his reputation spreads, and the higher is his total income, as well as his income for each performance, because he is shifting upward the demand curve for his services. The great surgeon is generally a very busy man. His income is monopolistic, in a sense, but he does not generally skimp in his use of his talents. All this seems to indicate that the ordinary evil of monopoly—restriction of supply—is not found here. It is unfortunate that high talents are not more plentiful, but here are the forces that tend to make them as plentiful as natural and environmental limitations—not monopoly limitations—will permit them to be. There are no barriers but those established by nature and environment to admission to the classes receiving these incomes. It is even fortunate that great talents should command high incomes, not only because high incomes encourage the development and cultivation of such talents, as far as possible, but because, as in the case of high-rent urban cities, they tend to insure the most advantageous use of scarce talents.

The illusion of rent as a "monopoly gain" appears most conspicuously in a growing city, where rents are rising and the general land market is one of few sellers and many buyers. In a city of declining population, this situation is reversed, and the land owners rent their land on a declining market, with heavy competition on the supply side.

Even if a considerable number of owners of business sites were to conspire to hold out of use a part of their land—as monopolists in general might do—it is not certain that they could raise their total rent, or even the rent on the land still employed. When all the land is offered, the land owners get a surplus over the costs represented by wages, interest and the entrepreneurs' profits. This surplus, which is ordinarily called rent, Professor Chamberlin calls "monopoly gains." If the land owners held part of the sites out of use, and demanded higher rent for the sites still in use, where would the increased rent come from? Not mainly from the profits of the entrepreneurs, if we assume that their profits are generally what their abilities would command anywhere. Before they would take much less, they would move, in the long run, either to other sites in the city, or to other cities. From an increase in the prices of goods sold on the sites still in use? No; these prices cannot rise perceptibly above the prices of goods sold on

the marginal sites. From an increase in the amount of business done on the sites still used? Possibly; but why might not the business section of the city expand to low-rent and no-rent land, until it occupied as large an area as ever, and the rent on the sites still used declined to its former level? It is difficult to see how these urban rent monopolists could afford to hold land out of use, even if they could act in concert. We have monopolistic combinations of every kind, but the writer has never read or heard of this kind.

That the land owners "love to reap where they never sowed," and are often able to appropriate income which is earned by others, is indeed as true today as it was in Adam Smith's time; but even that does not make them absolute monopolists. Professor Paul Nystrom has shown that rent increases relatively to profits on passing from smaller to larger cities, and on passing from poorer to better locations in a given city; and from this he concluded that the land owners absorb a part of the profits of the superior entrepreneurs.[8] The facts seem well established, but it is not theoretically demonstrable that the land owners are taking profits from the entrepreneurs, or that if they do, they do it as monopolists. There is no way of measuring the relative abilities of entrepreneurs, except by the amount of their earnings; and it is impossible to say how much profits they *should* earn on the high-rent sites, except by reference to other entrepreneurs operating on similar sites. Perhaps the number of able entrepreneurs is greater than is commonly supposed, and those using the best sites are not much abler than many others doing business on inferior sites. If this should be true, rent might absorb a larger proportion of the total income, without taking anything from profits. Or, it is possible that there are general economies in large-scale retailing which raise the rent of favorably located land out of proportion to its relative capacity to provide buyer contacts, and the land owners will be in a position to get the gains arising from this, gains which will smack of monopoly. Even if the high returns accruing to the valuable sites included some profits wrested from entrepreneurs, they would not be pure monopoly returns; for there are a number of sites available to each entrepreneur, as there are a number of entrepreneurs bidding for each site.

It appears, in conclusion, that Professor Chamberlin has confused the goods market and the land market; that he has given too little attention specifically to the land market in which rent is determined; that he has exaggerated the differences between agricultural rent and urban rent, and has failed to appreciate the analogies between these two incomes; and that, finally, as a result of all this, he has come to conclusions that are not valid. Agricultural rent is not a purely competitive return, and urban rent is not purely monopolistic; but, on the contrary, both are determined in an imperfectly competitive market.

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[8] *Economics of Retailing,* 1st ed., ch. viii.

INCIDENCE OF DEATH DUTIES

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Discussions of the incidence of death duties in economic literature have been, on the whole, scattered and fragmentary. The *Report* of the Committee on National Debt and Taxation (1927), the *Economics of Taxation* (1924) by Harry Gunnison Brown, and *First Principles of Public Finance* (1936) translation, by de Viti de Marco, are among the noteworthy exceptions. American writers in public finance generally have emphasized the descriptive aspects of particular death duties.

No less than four different conclusions of death duty incidence may be distinguished. These vary from the view that death duties are without burden, provided that substantially the whole of the estate is taken by such taxation, to conclusions that the incidence of death taxes is on the predecessor, the successor, or jointly, and in indeterminate proportions upon both the predecessor and the successor.

The view of incidence which it is believed may be most strongly supported is that the burden of death duties, including taxes directed to the estate as a whole as well as the distributive shares, is upon the predecessors. Incidence from this point of view is interpreted with reference to the immediate burden of such taxation, and is distinguished from the subsequent economic and other effects which result therefrom.

Although of ancient origin[1] and of major fiscal importance in the modern economy, there has been rather limited consideration, on the whole, of the problems of death-duty incidence and economic effects.[2] An important exception is found, however, in the investigation of the Committee on National Debt and Taxation, which directed no small part of its attention toward these aspects of the British estate, legacy, and succession taxes.[3] Customary discussions, particularly in American fiscal literature, have established emphasis on the descriptive features of operative estate and inheritance taxes. While the usefulness of this approach is not to be minimized, it is contended that the importance of death duty incidence, with its economic repercussions, justifies more than the casual treatment, apparently, so far accorded.

In the discussion of the incidence of death duties it will be assumed that taxes imposed on or measured by the value of an estate subsequent

[1] See Max West, *The Inheritance Tax* (New York, Columbia Univ. Press, 1908), 2nd ed., ch. 1; M. H. Hunter, "The Inheritance Tax," *Annals of Am. Acad. of Pol. and Soc. Sci.*, vol. xcv, May, 1921, pp. 165-6; E. R. A. Seligman, *Essays in Taxation* (New York, Macmillan, 1931), 10th ed. rev., ch. 5.

[2] Sir Josiah Stamp, in commenting upon contemporary discussions of death duties, states that "scientific economic inquiry into the subject of inheritance from the point of view of its purely economic effects has thus been very scanty amongst the classical economists. . . . The economic aspect of the subject suffers from the fact that it has nearly always been developed in an environment of political thought rather than scientific analysis—of a programme of social change to be formulated or supported." "Inheritance as an Economic Factor," *Econ. Jour.* vol. 36, Sept., 1926, pp. 347-8. See Hugh Dalton, *Some Aspects of the Inequality of Incomes in Modern Communities* (New York, Dutton, 1920), p. 283.

[3] See *Report* and *Minutes of Evidence* (vols. 1 and 2), Committee on National Debt and Taxation, 1927 (London, H. M. Stationery Office).

to the death of the owner, either on the estate as a whole or on parts of the estate, establish a common incidence. Differences in estate, inheritance, legacy, or succession taxes as to legal nomenclature, description, impact, taxpayer responsibility, rate graduation (as to size of estate and successor relationship), collection procedure, and the like, while of major importance in tax administration, are factors which do not exercise any controlling influence in burden situs. In other words, formalized division in tax base as between taxes imposed on the estate as a whole and the distributive shares, as well as the precise moment and point of legal impact, is interpreted as more of form than of substance and without real significance as to incidence.

The reasons which may be advanced in support of the above assumption are, first, the same *corpus* or body of wealth is the tax object, regardless of whether the tax is directed toward the whole or toward the parts. Second, the distinction between the distributive share and the estate as a whole, in the application of a tax, appears fundamentally to be a rationalized procedure of variance of the amount of a death duty in accordance with current social concepts of justice as found in the legitimacy of the expectation and claim of the successor to an inheritance.[4] Another factor in imposing a tax on the distributive shares, which is of lesser importance perhaps, is the administrative practicality of offsetting and correcting inequalities of wealth by rate graduation according to the size of the share rather than the estate as a whole. In the taxation of the latter (estate as a whole) the number of beneficiaries and size of individual bequests are disregarded. This suggests a substantial element of non-fiscal taxation in the inheritance tax as contrasted with the predominantly fiscal character of the estate tax. Differentiation of inheritance from estate taxation, therefore, appears to find explanation basically in certain socio-political purposes which may better be served by employment of a death duty directing attention to distributives shares of estates rather than to the entire *corpus* of the estate. This differentiation, of superficial importance, apparently, from an economic point of view, does not seem to impute any basic difference in incidence as between the two forms of death duties. Third, inheritance and estate taxes produce identical economic results from the standpoint of the inheritor—namely, reduction of the total amount which will be received and available to the use of the successor.

In discussions of the incidence of death duties in economic literature, not less than four sharply contrasting views may be distinguished. The arguments and reasoning which have been advanced in support of these

[4] Recognition of the legitimacy of the successor's claim to an estate finds expression in rate graduation in inheritance taxes in some correspondence with the remoteness of the blood relationship of successor to decedent. The three classes of heirs commonly distinguished are lineals, collaterals, and strangers to the blood.

several conclusions relating to burden situs differ decidedly in character. Perhaps death duty incidence is not as clear or as simple as has been argued on occasion.[5]

One view of the burden of death duties, a view which has not received noticeable contemporary support, is that taxes on inheritances, when equal to the whole (inheritance), do not constitute either a burden or a tax. This conclusion, expressed in 1795 by Jeremy Bentham, was phrased in the form of a question: *"What is that mode of supply, of which the twentieth part is a tax, and that a heavy one, while the whole would be no tax, and would not be felt by anybody?"*[6] If this view were sound we should have a method, in the words of Professor Glenn Hoover, "of getting money from the community without anyone's feeling the burden" and "if all the expenses of government could be provided for in this burdenless way, it might seem that the taxpayers' paradise was in sight."[7] Bentham reasoned that for taxes on inheritance to involve a burden there must be expectation of benefit through the legal right to succeed to estates, that through expectation only can there be disappointment and hence hardship, and that hardship in the form of disappointed expectation constitutes the measure of the burden attaching to the taxation of inheritances. Bentham believed that should the state take all, or a very large part, of the estate through taxation, then no one would suffer disappointment because there would be no expectation of receiving anything of consequence, and such taking by the state would be without oppression and burden.[8] Bentham's inheritance tax-escheat proposal is grounded in his belief that there is no natural right of inheritance, that the ends of social justice may be served by a sharp limitation through high tax rates on the legal right of succession of collaterals and others more distant in relationship, and that death-duty burden is to be interpreted in terms of the psychology of disappointment.

In evaluation of this theory of incidence it may be contended "that any addition by inheritance to the wealth of the individual increases his ability"[9] as a consumer as well as a taxpayer. Conversely, diminution of his

[5] W. J. Shultz observes that "the incidence of death taxes is simple to determine." His reasoning in support of this conclusion is that "neither directly or indirectly do they [death taxes] affect any business transactions which would permit them to be shifted. Their first and immediate effect is to reduce the estates of dead men and women. In consequence, the heirs and beneficiaries of these decedents receive smaller inheritances and bequests. Beyond any possibility of shifting, death taxes rest on these heirs and beneficiaries." *American Public Finance* (New York, Prentice-Hall, Inc., 1938), 2nd rev. ed., p. 439.

[6] *The Works of Jeremy Bentham* (Edinburgh, William Tait, 1839), Bowring's ed., part viii, p. 586.

[7] "The Economic Effects of Inheritance Taxes," *Am. Econ. Rev.*, vol. xvii, March, 1927, pp. 47-48.

[8] See Stamp, *op. cit.*, p. 345; also West, *op. cit.*, pp. 192-3.

[9] Seligman, *op. cit.*, p. 133.

inheritance in part or in whole by taxation or escheat decreases his ability. It may be argued economically that a burden exists, even though visualized as negative in character, because the inheritance has not been reduced to legal possession by the successor prior to the imposition of the tax. Should we view a death duty from the position of the predecessor rather than the successor, the argument may be made that the predecessor has exercised less than his full power of consumption during life, even though voluntarily, and, in consequence, has assumed and borne the burden of the tax. Taxes, including death duties, always carry an associated burden. Although the location of the burden may not always be clear, some individual, or group of individuals, will suffer a burden which will be reflected in a reduced economic power to consume over what it would otherwise be. Bentham believed that if a death duty were without burden to the successor the result would be a burdenless tax. Apparently he could not conceive that a death duty may establish incidence upon the predecessor, in part or in whole, a view contrary to that held by a number of economists today. Further, it seems that incidence in an economic sense may not be adequately explained in terms of the individual's psychological reaction. It is a commonplace that tax burdens, particularly in the case of indirect taxes, establish situs upon those who frequently have little or no realization of what is occurring. In consequence, an individual sense of loss or disappointment, or an appreciation that one's real purchasing power is less by reason of a tax, does not appear to be necessary. Incidence, with its associated economic effects, may be present nonetheless.

A second view of death-duty incidence which has received some, although on the whole minor, support is that the burden of such taxation rests upon the decedent. This view not infrequently regards death duties as a capitalized income tax or an occasional, compound property tax. Westlake, for example, observes that "death duties may be regarded as capitalized income tax, and that, therefore, the deceased person whose domicile is so influential in the death duties is in effect paying a deferred quota."[10] Professor Pigou, on the other hand, states that "from our point of view these duties are occasional property taxes"[11] and "instead of collecting a relatively small sum from each property every year, they collect a large

[10] J. Westlake, "The Theory of Taxation, with Reference to Nationality, Residence and Property," *Econ. Jour.*, vol. 9, Sept., 1899, p. 372.

Of a similar opinion is C. F. Bastable who declares that "we find that a fairly constant proportion of property passes annually by death, and we are thus led to regard the death duties as a capitalized income-tax levied only on accumulated wealth. . . ." (p. 594). And "on the whole, we may best regard the succession duties as presenting a parallel to the income-tax. The latter withdraws annually for the service of the state a portion of the new wealth created in the period; the former operate in the same way, but at uncertain intervals, on the collective wealth of the society" (p. 608). *Public Finance* (New York, Macmillan, 1927), 3rd ed.

[11] A. C. Pigou, *A Study in Public Finance* (London, Macmillan, 1929), p. 161.

sum from each property at intervals averaging about thirty years and associated with the death of the proprietor. This is the essential point."[12] Although he does not express specifically his conclusion as to the incidence of the compound property tax (death duties), it seems reasonable to infer that he views the burden as attaching to the decedent. He reasons that successors are indifferent to the amount of death taxes, that their consumption will remain unaffected by such taxation, and that the whole of the levy will be paid by the transference of an appropriate amount of estate value to the government.[13] Professor de Viti de Marco, in discussing a tax on successions, contends that the tax should be visualized as consisting of two parts.[14] One part represents the sum of annual postponed income taxes which is not paid until death.[15] He concludes that the incidence of this part of the tax is upon the decedent.[16] The other part is that excess of succession tax above the sum of the postponed income taxes, with incidence upon the successor.[17] However, he agrees that the full amount of the death duty is paid from the proceeds of the estate and does not impair or burden the successor's power to consume the pecuniary benefits of the inheritance excepted.[18] Professor G. F. Shirras takes the position that the estate tax is an occasional property tax,[19] and he argues vigorously that the incidence is upon the predecessor.[20] He dismisses as

[12] *Ibid.*

[13] "Since heirs as a rule look to what actually comes to them and are little interested in what would have come to them on the hypothesis that there had been no death duties, they are very unlikely to meet any part of a death-duty levy by cutting down their consumption. Even small levies made at that moment would, therefore, be paid to practically their full amount out of capital in the sense described above. *A fortiori* this will be true of large levies. Practically, we may conclude that the whole of death-duty levies will in fact be so paid; in other words, that, so far as the present argument goes, they will deplete the volume of savings by their full amount." A. C. Pigou, *op. cit.*, p. 163.

[14] "Thus the tax on successions consists of two parts: one is the debt accumulated by the deceased; the other is the new tax which falls on the heir. In all cases, however, the sum of the two is assessed on the inherited estate. . . ." *First Principles of Public Finance* (New York, Harcourt Brace, 1936), p. 362.

[15] *Ibid.*

[16] " . . . the heir accepts the inheritance with the privilege of inventory—that is, he pays a tax on the inheritance only if he finds that the estate which he inherits is large enough to pay the tax, after deduction of all debts. The sacrifice involved in the payment of the tax has therefore already been borne by the deceased, whose estate pays the tax." *Ibid.*, p. 361.

[17] *Ibid.*, p. 362.

[18] *Ibid.*, pp. 361-2.

[19] *Science of Public Finance* (London, Macmillan, 1936), 3rd ed., vol. ii, p. 542.

[20] "The incidence of death duties raises the question whether the burden falls on the testator or on the inheritor or on both. . . . It may be argued that the estate duty falls on the testator because it falls on the property accumulated by the deceased. It prevented his leaving more to the inheritor than would otherwise have been possible. The testator may deliberately save in order to meet the charge, and it may be said that the duty falls on him. The testator in his lifetime knows that his estate will be liable for the duty, and he knows approximately what the burden will be, assuming the present rate and estate valuation to be the same at death as when he makes his estimates. He, therefore,

being irrelevant any opposing contention that the testator is dead before the tax is levied and that the inheritor is the one who makes payment of the tax.[21] Professor Shirras believes that the crucial element in establishing incidence on the predecessor is to be found in the actions of the predecessor in saving or insuring to meet the tax. The saving of income, or the payment of insurance premiums (out of income), against the day of levy of the tax obviously indicates that the burden is on the predecessor. However, because testator actions may not be generalized, with the recognition that testators will react differently in their several environments, he believes it is better policy to regard the incidence of the estate tax as indeterminate.[22] In regard to legacy and succession duties he quotes with approval the conclusion of the Committee on National Debt and Taxation that the incidence is upon the successors.[23] Professor Edwin Cannan seems to imply that incidence is upon the predecessor when he observes that inheritance taxes "are a species of property tax levied at uncertain intervals" with "their exact effect . . . upon persons who expect to leave property . . . a psychological problem of some complexity."[24] The Committee on National Debt and Taxation suggests that while one may not say that the estate duty establishes incidence uniformly on predecessors, nevertheless, there is "good support for giving primary but not exclusive place to the notion that the incidence of the duty is on the predecessor."[25] This assignment of burden is based upon predecessor actions and state of mind as found in deliberate saving against the future death duty by curtailment of expenditure, greater industry, or both, which, in general, the Committee thinks occurs.[26] The argument that estate duty incidence attaches to the successor because the property coming into his possession and use is reduced by the amount of the tax, affecting the successor's, rather than the predecessor's, power to consume, is not regarded as persuasive by the Committee.[27]

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saves to pay for this and indeed insures against the tax. The incidence is clearly then on the testator, as was the intention of the legislature when it was imposed." *Ibid.*, vol. i, p. 386.

[21] *Ibid.*, pp. 386-7.

[22] *Ibid.*, p. 387.

[23] *Ibid.*

[24] Committee on National Debt and Taxation, *Minutes of Evidence, op. cit.*, vol. i, p. 60.

[25] *Report, op. cit.*, p. 171.

Professor J. M. Keynes appears to be in agreement with the conclusions reached by the Committee as to death duty incidence. He states that "our direct taxes [income tax and death duties] are exceedingly unpleasant to the rich individuals on whom their full weight falls. . . ." "The Colwyn Report on National Debt and Taxation," *Econ. Jour.*, vol. xxxvii, June, 1927, p. 199.

[26] *Ibid.*, p. 170.

[27] ". . . the mere fact that the duty diminishes the property into which the successor may enter is no proof of its incidence being on the successor. There is no absolute distinction between the Estate Duty and the Income Tax in this respect; the Income Tax,

The distinction and differentiation as to incidence between the estate duty on the one hand and the legacy and succession duties on the other by the Committee and by Professor Shirras, who follows the Committee in this regard, lie apparently in the formal differences between these two forms of death taxation as found in the rate graduation of the estate tax with respect to the size of the estate only, while the legacy and succession duties relate directly in rate graduation to the beneficial interests and their relationship to the decedent; in the legislative intention that the estate tax burden rest on predecessors and the burden of the legacy and succession duties on the successors; in the view of the Committee that the latter duties are in the nature of acquisition taxes on beneficiaries; in the belief that testators are less likely to make provision to meet the burden which they impose; and that these duties are not to be regarded as a deferred tax on the predecessor as is the estate duty.[28] In the judgment of the Committee the "intention is that the duties [legacy and succession] should fall upon the person receiving the benefit, and we think that, in fact also, the burden should generally be regarded as falling upon him.'"[29] However, the Committee does not appear to be convinced that its argument is adequate support of this differentiation. It concedes that "practically . . . the duties are very much in the nature of an addition to the Estate Duty, going some way to differentiate the total burden according to consanguinity. In the main, the considerations affecting the Estate Duty affect these duties also."[30]

The above reasons advanced by the Committee are not, in our view, of sufficient weight to justify economic differentiation in incidence between estate and legacy and succession duties. The case for the identity of incidence of these duties has been stated previously.

A third view, which has been quite generally endorsed by professional economists, contends that the incidence of death duties is upon the successors. Adam Smith asserted that "taxes upon the transference of property from the dead to the living, fall finally as well as immediately upon the person to whom the property is transferred."[31] David Ricardo, who did not favor death duties because he believed that they resulted in capital impairment, quotes Adam Smith with approval as to the location of incidence upon the successors.[32] In comparison with death duties he fa-

so far as it takes away income which would have been saved, is a tax on potential capital, retarding the accumulation of wealth and diminishing the estate which can be left on death, yet no one hesitates to ascribe the whole of its incidence to the predecessor." *Report, op. cit.*, p. 170.

[28] Committee on National Debt and Taxation, *Report, op. cit.*, pp. 171-2, 195.

[29] *Ibid.*, p. 172.

[30] *Ibid.*, p. 195.

[31] *Wealth of Nations* (London, Methuen), 4th ed., (Edwin Cannan), vol. ii, p. 346.

[32] "If a legacy of 1,000£ be subject to a tax of 100£, the legatee considers his legacy as only 900£ and feels no particular motive to save the 100£ duty from his expendi-

vored taxation of corresponding weight on income, commodities, or property, which would result in curtailment of consumption rather than diminution of capital.

Hugh Dalton has no difficulty in placing the incidence of a death duty squarely on the successor, for, as he says, "There has been some dispute as to whether its incidence is on the successor or the predecessor. Clearly . . . [the incidence] is on the successor, for the predecessor must be dead before the tax can be levied and dead men, like other inanimate objects, can pay no taxes."[33] He adds, "The fact that the predecessor may have insured against the tax beforehand is irrelevant to the question of incidence, though not, of course, to the wider question of effects."[34] Dalton assumes that a tax may impose no burden prior to the actual levy and collection, that restriction of consumption power, in anticipation of a tax and to provide for its payment, is without implication of incidence, and that the pressure of a tax upon one's mode of living, which measures burden, must always be subsequent to the imposition of a tax and may never be prior to its actual imposition. It seems that perhaps Dalton attaches undue significance to the particular time of payment and to the inability of the decedent to make the tax transfer through his own hands rather than the hands of the executors, or successors.

The Committee on National Debt and Taxation, as well as other writers on incidence, appears not to be impressed with the Daltonian argument. Sir Felix Schuster, in his appearance before the Colwyn Committee, expressed the judgment that the burden of death duties "falls on future generations, and to a great extent the present generation is inclined to disregard its consequences."[35] The basis of this conclusion is his belief that decedents during life, in general, make little or no advance provision for death duty payment by curtailment of current consumption because of the remoteness of the levy, as well as because of the difficulty of effecting satisfactory arrangements.[36] In consequence, because the incidence may

ture, and thus the capital of the country is diminished; but if he had really received 1,000£, and had been required to pay 100£ as a tax on income, on wine, on horses, or on servants, he would probably have diminished, or rather not increased his expenditure by that sum, and the capital of the country would have been unimpaired." *Principles of Political Economy and Taxation* (London, John Murray, Ricardo's Political Works, J. R. McCulloch, 1846), p. 89.

This illustration suggests the opposite of Ricardo's contention that death duty burden rests on the successor. If, as he says, the legatee considers any legacy in terms of its net amount (after deduction of tax) it would appear that there is no burden but only a net gain as measured by the amount of added purchasing power.

[33] *Principles of Public Finance* (London, Routledge, 1936), 9th ed., p. 53.

[34] *Ibid.*

[35] Committee on National Debt and Taxation, *Minutes of Evidence, op. cit.,* vol. i, p. 13.

[36] The decedent "does not provide by insurance because the corpus of the insurance is added to the corpus of his estate and he pays tax on that again. It raises the scale which he pays, so it seems hardly worth while to insure. Therefore the provident find it extremely difficult to make proper provision." *Ibid.*

not be assigned to the predecessors, it must rest, by exclusion, with the inheritors.

Henry Sidgwick is in agreement with Sir Felix Schuster both as to the situs of death duty incidence and the explanation for it. Sidgwick states that "it is plain that the pecuniary loss caused by any such tax falls on the person who inherits, since he would have been richer by the exact amount of the tax, if that had not been imposed; except so far as it is probable that the person from whom he inherits, being aware of the tax, may have left him a larger property in consequence—a probability which, I imagine, is not practically important in the case of most of the property obtained by inheritance."[37]

W. J. Shultz follows the same reasoning in observing that death duties result in a diminution of inheritances to successors by an amount proportionate to the tax; also, that no business transactions are affected by the tax, with the result that shifting is impossible. The incidence of such taxes, therefore, is on the beneficiaries.[38]

Professor Studenski points out that the "incidence of the tax in either case [estate or inheritance] is on the heirs, but it is distributed among them differently in the two cases. Thus, under an estate tax, the incidence frequently is entirely on the recipient of the residuary share. Other heirs, who are entitled under the will to shares of specified amounts, receive them without any deduction for the tax imposed on the estate."[39] The suggestion that the burden is not distributed among the heirs in proportion to their inheritances is, of course, correct, if the burden of death duties has its situs on the successors and if there is a residuary share, or shares, in combination with specific bequests.

Professor H. G. Brown concludes that death-duty incidence is upon successors, apparently, unless shifting occurs under circumstances of which the burden rests on laborers or landowners, or both, in the long run.[40] Professor Brown reasons that if personal motives to save are affected adversely by death taxation the total accumulation of wealth will

[37] *The Principles of Political Economy* (New York, Macmillan, 1901), 3rd ed., p. 579.

[38] *American Public Finance* (New York, Prentice-Hall, 1938), 2nd rev. ed., p. 439; see also *Encyclopedia of the Social Sciences*, vol. viii, p. 48.

Shultz apparently repudiates this conclusion in a subsequent statement in which he says that "inherited wealth is in the nature of a windfall. Beneficiaries and heirs have not earned it and have no right to it other than that created by state statutes of descent and bequest. Furthermore, until they receive their shares from the executor or administrator of the estate, the taxed property does not belong to them and they can not be considered as burdened by any taxes upon it." *Ibid.*, p. 441.

[39] In W. E. Spahr and others, *Economic Principles and Problems* (New York, Farrar and Rinehart, 1936), 3rd ed., pp. 641-2.

[40] *The Economics of Taxation* (New York, Holt, 1924), p. 209.

In the words of Professor Brown "so far as such a tax did operate to decrease the volume of saving and raise interest rates, its burden would be upon laborers or landowners or both and not upon owners or inheritors of capital." *Ibid.*

be decreased, or not increased at as rapid a rate as would otherwise be the case.[41] As a result, the rate of interest[42] will rise, relatively, and the burden of the death taxes will be shifted, in part or in whole, from the shoulders of the successors. Should shifting occur, presumably the interest return per unit of inherited capital will rise relatively to the point at which the diminution in the amount of capital will be offset.[43] Successors, therefore, will not find their position less favorable in consequence of the tax. While Professor Brown thinks it probable that some shifting occurs, he believes that one may not conclude definitely that this is the case.[44]

Professor J. M. Keynes speaks of the probable unfavorable reactions of death duties upon the national savings, but does not relate such repercussions to shifting.[45]

Professor A. G. Buehler seems to infer that the incidence of inheritance taxes is to be distinguished from whatever subsequent economic effects may result therefrom through influence on savings and interest rates.[46] In his judgment death duties are not shifted.[47] Professor Buehler apparently employs the term incidence in the narrow sense as defined by the Committee on National Debt and Taxation,[48] while Professor Brown gives

[41] *Ibid.*, pp. 208-210.

[42] The complex of rates of interest.

[43] H. G. Brown, *op. cit.*, pp. 209-10.

[44] *Ibid.*, p. 211. Professor H. M. Groves agrees with Professor Brown that if shifting takes place it occurs principally "through reduced saving and the higher rates of interest which might follow therefrom." However, the "factors here involved are remote and uncertain in their operation and effects." *Financing Government* (New York, Holt, 1939), pp. 145-61.

Professor J. P. Jensen, on the other hand, maintains that the "argument that in the long run the tax will be shifted because persons accumulating estates, and facing the prospect of a tax that will reduce the estate, or the separate shares thereof, will be moved to save less or work less, thereby reducing the nation's stock of capital, has not much weight. It might equally plausibly be argued that such persons will save more and work harder in order to leave an estate of a contemplated amount. Probably the prospect of the tax has no appreciable net effect one way or the other." *Government Finance* (New York, Crowell, 1938), p. 202; see also T. S. Adams, "Effect of Income and Inheritance Taxes on the Distribution of Wealth," *Proceedings*, Am. Econ. Assoc., vol. 5, 1915, p. 240.

Professor E. R. A. Seligman observes that "the ulterior effects of which some writers speak, such as the influence of inheritance taxes on the accumulation of capital, do not really illustrate the process of shifting. They are, moreover, of such doubtful validity that they may be neglected." It is his opinion that "a tax on inheritances or bequests cannot be shifted, for evidently there is no one to whom it could be transferred." *The Shifting and Incidence of Taxation* (New York, Columbia Univ. Press, 1910), 3rd ed., p. 371.

[45] *Op. cit.*

[46] Inheritance taxes "are not shifted, although it is debatable how such taxes may influence the accumulation of capital and interest rates." *Public Finance* (New York, McGraw-Hill, 1936), p. 241.

[47] *Ibid.*

[48] The Committee states that economists generally attach a narrow meaning to the term incidence. "For them 'incidence' is only concerned with the question on whom the more immediate burden of the tax as a tax rests," while "in general usage the term

it a broader connotation, which seems to include the principal sequential economic tax effects.[49]

A fourth view of death-duty incidence finds expression in the conclusion that the burden is partly on the predecessors and partly on the successors, with the proportions indeterminate. This theory of the mutual sharing of burden is illustrated by the analogy of estate duty to income tax as outlined by the Colwyn Committee—namely, that "when one compares the Income Tax with the Estate Duty, regarding the latter as a kind of postponed Income Tax, one sees clearly the solidarity of the interests of predecessor and successor. The Income Tax, in a concealed way, hits the taxpayer's son as well as the taxpayer himself, and may hit him just as severely. But the damage is separated by a time-gap. In the case of the Estate Duty the time-gap is bridged, and the damage is at once apparent."[50] As previously indicated, the Committee does not follow this analogy in reaching its conclusions of incidence. Although H. A. Silverman supports the conclusions and reasoning of the Committee generally, he goes somewhat further in that he approves the theory of mutuality in death-duty incidence under circumstances in which "the economy during the testator's lifetime has directly or indirectly affected the income and standard of living of the heir."[51] He believes that the actions of the predecessor as affected by the death taxes is the determining factor in establishing incidence.[52] When the standard of living of the testator has been unaffected and his productive efforts not increased, then the burden is wholly on the successors; conversely, the burden rests solely with the predecessor should he work harder and through the extra effort accumulate a sum equivalent to the duties. However, it seems reasonable that the income or standard of living of successors, particularly direct heirs, will be affected either directly or indirectly if the predecessor has reacted in any positive fashion, even in minor degree, toward protecting his estate. In this event, according to Silverman, the burden of the duties would be shared by predecessor and successors. It seems that if the personal equation of the testator is the all-important consideration then the determina-

covers not only the initial burden of a tax, but also the whole range of consequential effects." *Report, op. cit.*, p. 106.

[49] For others (than those whose conclusions have been discussed) who appear by implication to hold to the view that death duty incidence is on the successors see J. P. Jensen, *op cit.*; Solomon Huebner, "The Inheritance Tax in the American Commonwealths," *Quart. Jour. Econ.*, vol. xviii, Aug., 1904, p. 548; T. S. Adams, *op. cit.*; M. S. Kendrick, *Taxation Issues* (New York, Harper, 1933), p. 119; H. A. Millis, "The Inheritance Tax in the American Commonwealths," *Quart. Jour. Econ.*, vol. xix, Feb., 1905, p. 298; A. C. Pleydell, "The Incidence of Taxation," *Proceedings*, Nat. Tax Assoc., 1907, p. 429; John Harrington, "The Inheritance Tax," *Annals of Am. Acad. of Pol. and Soc. Sci.*, March, 1915, p. 87; Max West, *op. cit.*, p. 215.

[50] Committee on National Debt and Taxation, *Report, op. cit.*, pp. 170-1.

[51] *Taxation, Its Incidence and Effects* (London, Macmillan, 1931), pp. 194-5.

[52] *Ibid.*, p. 195.

tion of death duty incidence by those other than the decedent himself is largely an impossibility.

In passing these various theories of death duty incidence briefly in review, with the supporting arguments of certain of their principal proponents, substantial diversity in approach, in assumptions, either express or implied, and in reasoning is apparent. Certain writers, as has been noted, seem to be strongly impressed with the formal legal differences rather than the substantive economic similarities of the estate tax as compared with legacy and succession, or inheritance taxes; also, legislative intention as to burden situs seems to be given some significance in determining the location of burden. The fact that the predecessor has no animate existence at the time of the imposition of death duties and cannot, in person, tender the tax payments has been a highly persuasive consideration. The reaction of testators during life in anticipation of death taxes, likewise, has been regarded as a highly important factor. The extent to which the economic relationships of successors to predecessor have been affected by more or less advance tax provision on the part of the testator has been treated as a critical element in assigning incidence. The repercussions of death duties on capital supply, and through capital supply to interest rates, have been regarded as indicative of their shiftability from point of original situs.

For reasons stated previously, it is believed that death taxes, whether on the estate as a whole, or levied separately on its parts, should be regarded as establishing the same incidence. Economic considerations, rather than legislative intention, are regarded as determinant of burden location, though the latter may be of considerable political or social interest. The inability of the predecessor to tender tax payment in person, which, it is alleged, relieves the testator of burden, confuses incidence with payment. Further, the burden of a tax is not necessarily subsequent to the payment of a tax. Frequently the burden of a tax will be felt, and amortized, through curtailment of real income, prior to the time of actual payment. Especially is this true of direct taxes. While the reactions of predecessors to death duties as found in increased productive effort, or in curtailment of consumption power, or both, are of importance from the point of view of the economic effects of the duties and of testator psychology, these reactions do not seem to be an appropriate indication and measure of incidence. One's consciousness of a tax, admittedly of importance in terms of certain economic effects, does not serve, apparently, to determine burden situs. Indirect taxes are illustrative, frequently, of taxes which establish situs on those who may have no consciousness of burden, but whose real income is nevertheless impaired. Clearly, those who acquire by birth, marriage, or in other ways, a status of economic or social dependency

upon the testator will have their incomes or standards of living affected in some degree, directly or indirectly, by whatever the predecessor may do, whether it be by curtailment of consumption in anticipation of the death duties, or in the act of saving to create an estate without consciousness of such taxation. It appears that these are matters which relate to economic effects, of taxation or of the act of saving, rather than to tax incidence. If the term incidence is interpreted and applied with reference to the attachment of the immediate burden of the tax, it seems that the extent to which personal motives to accumulate are affected by the duties should be regarded as an economic effect of incidence. Admittedly, in certain cases the motives to save or accumulate may be weakened in consequence of the psychological reactions of predecessors to death taxation.[53] This seems, however, more appropriately to be regarded as an effect of incidence rather than a part of the process of incidence establishment at a point apart from the predecessor. An analogy may be drawn between personal net income taxes and death duties in terms of the absence of subsequent price transactions, and the indirect and indecisive manner in which personal industry or activity may be affected in the former case and personal saving in the latter. From this point of view, death duties appear not to be shifted, even though capital supply is diminished relatively in consequence, thereby causing a rise in interest rates.

In conclusion, it is submitted that death duties, including both estate and inheritance taxes, may be regarded as establishing full and final incidence upon predecessors. From this point of view, incidence is interpreted as involving the immediate burden only. Further, burden is visualized positively rather than negatively. Successors to estates, in an economic sense, seem, therefore, to be the beneficiaries of a fortuitous income[54] to the net extent of the benefits. Although inheritance, particularly by lineals, may be regarded as based on a strong moral and ethical foundation, an economic basis as found in direct estate creation in general seems wanting. The sharing in estates through the legal right of succession appears to constitute a net gain to successor real income, regardless of amount, or of tax and other deductions which may be made in reaching the net share available to the use of the beneficiary. From this approach, it does not appear that the successor's power to consume will be burdened except in a negative sense, with the distributive share larger in the absence of death duties. The successor finds himself in the position that his standard of living is increased over and above his individual economic exertions. On

[53] Possible offsets to the relative diminution of capital supply as a result of death taxes may be found in the lessened weight of other forms of taxation and in the character of the public expenditure of death-duty revenue.

[54] "What is principal or corpus to the estate is 'fortuitous' income to the distributees of the estate. . . . " T. S. Adams, *op. cit.*

the other hand, the predecessor, by estate creation through saving and industry, or by failure to employ his full economic resources to achieve a maximum standard of living during life, even though part of these resources consists of an inheritance of which he was the beneficiary, has not exercised his full power of consumption. The incidence of death duties, as well as those economic costs of estate creation or preservation to which estate the beneficiaries succeed, seems, therefore, to rest upon the predecessor.

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DIVISION OF THE TAX BURDEN AMONG INCOME GROUPS IN THE UNITED STATES IN 1936

Recent statistical studies of the tax payments of members of different income groups (Twentieth Century Fund) and of the numbers of persons in those groups (National Resources Committee) now make possible calculations of the actual distribution of the tax burden in the United States with a fair degree of accuracy. Allowance must be made for various possibilities in the shifting of indirect taxes and for differences in the tax systems of different states. That fortunate few (1.4 per cent) whose incomes exceeded $7,500 paid one-third of the nation's taxes. An analysis by taxing divisions shows the median income for dividing the tax burden equally above and below was $2,600 for the nation as a whole, $2,000 for state and local taxes (Illinois), and $15,000 for federal taxes. The lower income groups paid a higher percentage of the tax burden than the percentage of the national income which they received.

The questions of who pays our taxes and who should pay them are perennial. Economists have long discussed the question of tax shifting to explain why certain taxes are or are not a burden upon the immediate payers thereof. The reasoning has been largely *a priori* and only in the past few years have statistical investigations been made. To correlate one of those studies with recent findings on income distribution and draw further conclusions is the purpose of this paper.

In *Facing the Tax Problem* and *Studies in Current Tax Problems* the Twentieth Century Fund (hereafter: TCF) has published the results of an extensive investigation into the tax burden of ten "typical" representative families of different income classes.[1] Separate calculations were made under five different shifting hypotheses. Federal, state, and local taxes as of 1936 were analyzed to determine their probable incidence on the families selected. As a result of extensive computations, Professor Newcomer and her associates under the Fund derived conclusions regarding the total tax burden per family. The findings were expressed both in terms of dollars and as percentages of total incomes that would have been received had no taxes been shifted.

Valuable as this study is, it does not afford an answer to the question, "What percentage of the total tax burden of the country is borne by the people of different income classes considered as groups?" Wealthy people often allege that they are paying most of the cost of government. Occasionally they change their tune and try to arouse popular disapproval of government spending by claiming that all taxes are shifted to ultimate consumers and that therefore the poor, being the most numerous, shoulder the tax burden of the country.

Legislators are also interested in this question. It is not enough for them to know the TCF estimate that the man with a $1,000 income pays approximately 10 per cent of his income in direct and hidden taxes and that the $5,000 man pays 20 per cent. They should also know how much of the

[1] New York, 1937.

total cost of government is paid by people with incomes under $1,000, or over $5,000. Only by considering both sets of percentages can an "equitable" tax policy be formulated.[2]

In the studies referred to, there were five different assumptions regarding tax shifting.[3] We have omitted the fifth, as highly improbable, and for New York have combined the second and third into our number II since they differ only regarding the shifting of the sales tax and New York State has none.[4] This left seven different estimates for the taxes borne by each of ten "typical" families. The next problem was to combine the estimates for farm incomes of $500, $1,000, and $2,000 with the wage-earner incomes of $1,000 and $2,000 to get representative figures for income receivers in the country as a whole. At the $5,000 level the merchant and salaried employee estimates of the Twentieth Century Fund also had to be correlated and then from the combined figures interpolations were required to fill the gaps between the representative incomes chosen.

To estimate the tax paid by wage earners at the $500 level, a figure was chosen from 51 per cent to 58 per cent of the tax paid in the $1,000 income group, the percentage varying with that shown by farm taxpayers in the two groups under the seven different assumptions. An average of the two

[2] A "sound" tax policy may, unfortunately, involve measures which in the short run appear unjust. Soundness and justice are at best relative terms and usually have not the same reference for different people.

[3] A. Assumptions unchanged from series I to IV:
- 1. Taxes borne by the payer (or stockholder, if corporation)
  - a. Personal income tax (husband and wife make separate returns, except for the $5,000 salaried worker)
  - b. Death and gift taxes (property divided between parents and substantial gifts made to children, except for $5,000 salaried worker)
  - c. Business net income and capital stock taxes
  - d. Stock transfer tax
  - e. Mortgage tax

B. Assumptions changing with different series:
- 1. Land Tax
  - a. Series I, II, III: all capitalized.
  - b. Series IV: half capitalized; half borne like tax on improvements.
- 2. Taxes on improvements, personalty, commodities, gross receipts, motor vehicles, motor fuel
  - a. Series I: entirely shifted
  - b. Series II: half shifted to final consumer; half borne by taxpayer
  - c. Series III and IV: half shifted to final consumer; one-fourth of sales tax shifted back to producer of commodities; one-fourth borne by merchant-taxpayer.
- 3. Payroll tax (applies only to the 1 per cent levy of 1936)
  - a. Series I: entirely shifted
  - b. Series II, III, IV: one-third shifted to final consumer; one-third shifted to employee; one-third borne by taxpayer

(Rearranged from *Studies in Current Tax Problems*, p. 11.)

[4] Series V was the same as series IV except that husband and wife were assumed to make joint, not separate, income-tax returns, and that the husband did nothing to reduce estate and inheritance taxes (*idem.*).

occupational estimates at $500 was then computed weighting farmers 2 and wage earners 1. This ratio was based on the Brookings study of farm and non-farm families in 1929.[5] At the $1,000 income level both figures were given and needed only to be combined. Weights here were changed to 1 for farmers and 2.5 for wage earners, again following the Brookings data. At $2,000, the weights were 1 to 7.

The $5,000 income group presented a different problem since farmers were dropped and a comparison was made between the tax burden of a salaried man and a merchant. From census reports we estimated that a weighting of 5 to 1 would be appropriate for this average. The merchant's position as a taxpayer is complicated by the question of how much of the sales and property taxes he can shift. For Illinois merchants this is very important since in that state the retail sales tax forms a major source of revenue. One should note, however, that the TCF study classifies within the $5,000 income class those whose *potential* incomes are greater than $5,000. Thus the merchant, who under assumption IV in Illinois is assumed to bear $4,736, in federal, state, and local taxes, had a potential income of $8,777 so that he is not left with such a small remainder as a comparison of the tax burden with $5,000 would indicate.[6]

The next step was to compute the number of persons in each of the income groups. These were estimated from the National Resources Committee (hereafter: NRC) report on *Consumer Incomes in the United States, Their Distribution in 1935-36*.[7] Without the fortunate coincidence in the years covered by this and the TCF study, the present computations would have been much more difficult, if not impossible. Even so, there are numerous difficulties in combining the two sets of data. For instance, the NRC report gives the income distribution among both families and single individuals, but Professor Newcomer investigated tax burdens only in the budgets of families. Obviously there are differences between the budgets of families and single individuals, but no material was available to permit separate tax computations for the latter group. These unattached persons could not be excluded from a picture of the tax burden of the country as a whole since they spent about one-fifth of the total national income in 1935-36. Hence they were grouped with families; and all consuming units were considered to have equal tax burdens at their respective income levels.

Representative cases were then sought, following the seven levels re-

[5] Leven, Moulton, and Warburton, *America's Capacity to Consume*, Washington, 1934, p. 227. These figures undoubtedly underrate the number of non-farm families having low incomes in 1936.

[6] "Potential income is actual income less the amount of the tax on land that, it is assumed, has been capitalized and plus the additional amount that would have been received in the absence of certain taxes." *Studies in Current Tax Problems*, p. 22. For the complete table of potential incomes under the different assumptions see Table A-17; *idem.*, p. 28.

[7] Washington, U. S. Government Printing Office, 1938, Table 2, p. 6.

maining in the TCF tables after the consolidations described above. Only the $100,000 example was discarded as coming at an inconvenient interval. Seven others were added at appropriate and easily calculated levels. Figures sought were those which gave medians such that the total number of consuming units in the NRC table would be divided with approximately half above and half below the median. A margin of error inevitably entered here. For instance, there were 6,711,000 cases below $500 annual income, and 5,772,000 in the group from $500 to $750, yet $500 was chosen as the median figure. Since those receiving less than $500 spent amounts ranging down to zero, perhaps the median of this large group of 12,483,000 families should have been $400 or $450 with a corresponding reduction in the amount of the average tax burden per case. By a similar line of reasoning, perhaps $1,450 and $1,950 would have been more accurate medians than the $1,500 and $2,000 round numbers chosen. At the higher incomes where interpolations in the Twentieth Century Fund estimates had to be made anyway, medians were chosen at the most exact points possible, such as $37,000, $65,000, and $600,000. These errors in the lower income groups tend to make the final tax burden computations slightly higher at those levels than they should be; but we believe the figures are not seriously out of line considering the inexactitude which perforce accompanies all the computations upon which this paper is built. The margin of error in the final results is larger than we should like, but not so great as to prevent their being useful in presenting a general picture of the distribution of the tax burden of the country.

From the tax burden estimates of the TCF study Lorenz curves were plotted for each of the New York and Illinois hypotheses and figures for the seven interpolated incomes (shown in Table I) were read.

With these basic data in hand we proceeded to multiply the tax burden of the representative (median) case by the number of cases to get the total tax burden of the group. This was done for each of the shifting assumptions in the two states. The sums of the seven columns thus obtained ranged from $10,773,000,000, to $12,570,000,000. As a cross-check for accuracy, these figures were compared with the National Industrial Conference Board estimates of the total tax burden of the nation which was $10,498,000,000 for 1936.[8] Our totals appear slightly higher than they should be, but when reduced to percentages of the whole the discrepancy cannot be serious. And it is with percentages that we are most concerned.

If our computations do not introduce too great a margin of error, perhaps the above comparison may be used to test the relative validity of the four shifting assumptions used. That is, assumptions II and III as applied to New York State conditions give the lowest total tax burdens and there-

[8] *Cost of Government in the U. S.* (quoted in the National City Bank *Bulletin* for July, 1938, p. 82).

TABLE I

DISTRIBUTION OF TAX BURDEN BY INCOME GROUPS, 1936

Income groups (dollars)	Median income (dollars)	Number of cases in group	Total tax burden per case New York families (dollars)		
			Shifting assumptions		
			I	II and III	IV
0–750	500	12,482,871	75	80	105
750–1,250	1,000	10,867,073	160	140	170
1,250–1,750	1,500[1]	6,633,332	233	205	230
1,750–2,250	2,000	4,000,557	317	266	318
2,250–4,000	2,800[1]	4,083,628	520	375	450
4,000–7,500	5,000	844,457	1,078	1,014	1,152
7,500–15,000	10,000[1]	368,324	2,380	2,400	2,790
15,000–30,000	20,000	133,331	7,459	7,679	8,075
30,000–50,000	37,000[1]	26,299	14,500	15,700	16,200
50,000–100,000	65,000[1]	13,041	28,000	30,400	30,500
100,000–500,000	200,000[1]	5,060	135,000	115,000	120,000
500,000–1,000,000	600,000[1]	240	453,300	455,000	460,000
1,000,000 up	1,000,000[2]	87	1,114,597	1,155,622	1,180,487

Median income	Total tax burden per case Illinois families (dollars)			
	Shifting assumptions			
	I	II	III	IV
500	72	70	78	84
1,000	166	135	140	156
1,500[1]	258	200	200	228
2,000	337	264	269	302
2,800[1]	478	455	410	510
5,000	1,046	1,527	1,304	1,628
10,000[1]	2,500	2,800	3,200	2,800
20,000	6,291	6,288	7,488	6,599
37,000[1]	13,100	12,500	14,000	13,300
65,000[1]	25,800	24,500	27,000	26,400
200,000[1]	115,000	120,000	133,000	105,000
600,000[1]	475,000	480,000	450,000	410,000
1,000,000[2]	1,034,269	1,062,966	1,167,966	1,079,997

[1] Interpolated figures at these levels for all shifting assumptions.

[2] N.B. *Potential* incomes at the $1,000,000 level were from $1,277,190 to $1,434,946. Other levels were also higher than the median income would indicate. See note 6, above.

fore might possibly be considered more representative of conditions prevailing throughout the country than assumptions I and IV. The Illinois totals are also lowest for II and III. Both of these assumptions hypothecate only a partial shifting to the final consumer of such taxes as excises, payroll, customs, personalty, and realty improvements. Hence they do not give

such high figures for the tax burdens of low income groups and reduce the total.[9]

By dividing the tax burden of each group by the total under the several assumptions, the percentages were computed and then added to show cumulative percentages from the lower income groups on upward. These figures are given in Table II.

The poorest 12,483,000 cases, or 32 per cent of the total, with incomes below $750, bore about 9.2 per cent of the total taxes of the country under assumptions II and III for New York. Slightly less than half of the nation's

TABLE II

CUMULATIVE TAX BURDEN BY INCOME GROUPS

Upper limit of group	Cumulative percentages total tax borne							Cum. per cent number cases in groups	Cum. per cent aggregate income received by groups
	New York			Illinois					
	I	II and III	IV	I	II	III	IV		
$ 750	7.8	9.2	10.4	7.6	7.8	8.5	8.6	31.6	9.6
1,250	22.2	23.3	25.0	22.8	20.9	21.8	22.5	59.2	27.7
1,750	35.1	35.8	37.2	37.3	32.7	33.4	34.7	76.0	44.1
2,250	45.6	45.6	47.3	48.7	42.2	42.8	44.6	86.1	57.3
4,000	63.2	59.7	61.9	65.2	58.8	57.4	61.6	96.5	76.9
7,500	70.8	67.6	68.4	72.7	70.3	67.0	72.8	98.6	84.1
15,000	78.1	75.8	76.6	80.5	79.5	77.3	81.2	99.56	90.2
30,000	86.4	85.2	85.9	87.6	87.0	86.0	88.4	99.89	94.9
50,000	89.6	89.0	89.3	90.5	89.9	89.2	91.3	99.96	96.6
100,000	92.6	92.7	92.5	93.3	92.8	92.3	94.1	99.99	98.1
500,000	98.3	98.1	97.3	98.2	98.2	98.2	98.4	100.00	99.5
1,000,000	99.2	99.1	98.2	99.2	99.2	99.1	99.2	100.00	99.7
Maximum	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.00	100.0

taxes were taken from the pockets of that 86 per cent of the people having incomes below $2,250 in 1935-36. To look at it from the top, the upper 3.5 per cent of the families and single individuals bore 40 per cent of the tax burden. If "the rich" may be called those with incomes over $7,500, then they number 1.4 per cent of the population and paid almost one-third of the taxes.

Another view of the same results is revealed by Table III which shows the percentage at even tens as read from a Lorenz curve plotted from New York II and III figures. With it is combined percentages showing the

[9] Assumption IV is the same as II in the matter of shifting the taxes listed above, but it provides that half of the land tax is not capitalized, but borne as in the case of taxes on improvements. This, of course, would add to the burden of all taxpayers, particularly farmers. See note 3.

amount of income received by those at each income group and cumulative. The lowest 50 per cent of the cases paid only 18 per cent of the taxes out of 21 per cent of the national income. Half the nation's tax burden fell on that 10 per cent of the families and single individuals with incomes over $2,600. But these cases received only 36.2 per cent of the national income. In other words, these figures clearly substantiate the conclusions that the rich pay most of the taxes, first, because they get most of the income, and second, because they are taxed in various ways so as to take a higher percentage of that income than of their less fortunate neighbors. The poorest of the poor, that 30 per cent of our nation's families and single

TABLE III

PER CENT OF TAXES BORNE AND INCOME RECEIVED, BY TENS (FOR NEW YORK, SERIES II AND III)

Incomes below and between	Per cent					
	Cases	Cum. cases	Taxes borne	National income	Cum. taxes borne	Cum. national income
	(poorest)					
$ 340	10	10	2.4	1.7	2.0	1.7
545	10	20	2.8	2.9	4.7	4.6
720	10	30	3.8	4.3	8.9	8.9
880	10	40	4.0	5.5	13.0	14.4
1,070	10	50	5.0	6.6	18.0	21.0
1,275	10	60	6.0	7.5	24.0	28.5
1,540	10	70	7.0	9.3	30.8	37.8
1,925	10	80	8.8	11.5	39.5	49.3
2,600	10	90	10.0	14.5	49.8	63.8
Maximum	10	100	50.2	36.2	100.0	100.0
	(richest)					

individuals who receive annual incomes of less than $720 per year seem doubly cursed. Not only do they receive a meager fraction of the national income, but in relation to the amount they receive they shoulder a larger percentage of the national tax burden than the large middle class just above.

A further comparison of interest is obtained by dividing the percentage of the aggregate tax burden borne by the members of each income group by the percentage of the total national income received by that group. The quotients for New York, II and III, are given in Table IV and reveal that no group under $4,000 income bore as large a proportion of the tax burden as the proportion of its income to the total of the nation.[10] The disturbing thing about these quotients is that they do not rise evenly as incomes increase. In fact, they decline up to $4,000 and then rise till the highest

[10] An exception must be made for those receiving less than $720 as noted above and shown in Table III. At $750 the cumulative amount swings over to the other side.

group is reached. Under other shifting assumptions whose quotients are not given here, the downward trend in the lower groups also occurs, though not always so evenly, nor always with the break just at $4,000. From these figures and those of Table III, it looks as though the tax system should be revised so as to reduce the incidence upon the very lowest groups and shift part of their burden to the groups just above. Whether all of the lower income groups should pay at a reduced rate and how much the reduction should be are questions not being considered here.

If 1939 be compared with 1936 in the matter of the incidence of the tax burden, the major change to note is the increased levies under the

TABLE IV

PROPORTION OF INCOME AND PROPORTION OF TAX BURDEN (FOR NEW YORK II AND III)

Income groups	A Per cent national income received	B Per cent nation's taxes borne	Quotient B/A
0–750	9.6	9.2	0.96
750–1,250	18.1	14.1	0.78
1,250–1,750	16.4	12.5	0.76
1,750–2,250	13.2	9.8	0.74
2,250–4,000	19.6	14.1	0.72
4,000–7,500	7.2	7.9	1.10
7,500–15,000	6.1	8.2	1.34
15,000–30,000	4.7	9.4	2.00
30,000–50,000	1.7	3.8	2.24
50,000–100,000	1.5	3.7	2.47
100,000–500,000	1.4	5.4	3.86
500,000–1,000,000	0.23	1.0	4.35
1,000,000 up	0.27	0.9	3.33

Social Security act and the unemployment insurance laws of the several states. Thus, the payroll tax for unemployment insurance is now 3 per cent instead of the 1 per cent used in the TCF study, and for the old-age annuities an additional 1 per cent is being collected together with 1 per cent levied upon pay envelopes. Many states levy an additional 1 per cent or more for their own unemployment insurance funds. The increase in taxes of this kind from 1 per cent to a total of about 6 per cent must have measurably increased the burdens of the low income groups both as customers and as employees.[11] However, the total tax collections in this category amount to

[11] Some contend with apparent logic that nearly all of the payroll taxes will ultimately be shifted to the employees and very little burden remain upon consumers. This is contrary to the assumptions in any of the TCF series. *Cf.* James K. Hall, "Incidence of the Federal Social Security Pay Roll Taxes," *Quart. Jour. Econ.*, vol. liii, Nov., 1938, pp. 38-63.

less than 10 per cent of the total tax burden of the country and to make allowance for them would not greatly modify the conclusions already drawn. A third of the national income would still be received by those with incomes above $3,000 and some 40 to 45 per cent of the taxes would be paid by them.[12]

There next remains to investigate the difference between the distribution of the tax burden of the federal government and that of state and local governments. Using TCF figures for taxes and NRC for income distribution as before, we computed the relative tax burdens as shown in the following table:

TABLE V

CUMULATIVE PERCENTAGES OF TOTAL TAX BORNE, FEDERAL *versus* STATE AND LOCAL BY INCOME GROUPS, UNDER DIFFERENT ASSUMPTIONS

Upper limit of groups	New York Series II and III		Illinois Series II	
	Federal taxes	State and local taxes	Federal taxes	State and local taxes
$ 750	3.7	11.9	3.8	10.6
1,250	9.3	28.6	10.1	26.9
1,750	14.1	42.3	15.8	40.9
2,250	18.2	53.9	20.3	52.4
4,000	26.1	70.8	30.3	73.6
7,500	34.1	78.6	37.9	86.7
15,000	45.4	86.7	50.2	94.0
30,000	64.6	92.8	68.0	97.2
50,000	72.9	94.8	76.0	98.2
100,000	80.8	96.7	84.0	99.1
500,000	94.0	99.3	94.8	99.7
1,000,000	97.2	99.7	97.5	99.9
Maximum	100.0	100.0	100.0	100.0

These percentages clearly reveal the regressive nature of state and local taxes as compared with federal. In New York under tax shifting assumptions II and III, those with incomes below $2,250 bear about 54 per cent of the state and local taxes, but only 18 per cent of the federal tax burden. In Illinois under assumption II federal taxes are borne 50-50 by those above and those below $15,000 annually; for state and local taxes the dividing line is much lower, only $2,200. For all taxes the national average was about $2,600, revealing the way in which our heavy state and local tax burden pulls the whole burden far away from the progressive ideal.[13]

The contrast is perhaps best shown by constructing another table of

[12] The payroll and pay envelope taxes under the old-age annuity provisions are not levied upon that portion of the income of an individual in excess of $3,000 from a single employer. The payroll tax for unemployment insurance was not thus limited in 1936.

[13] New York and Illinois are not truly representative in the matter of income distribution, but percentages for the country as a whole had to be used for want of any local ones.

quotients similar to that of Table IV in which the percentage of the taxes borne by each income group was divided by the percentage of the aggregate national income received by each group. The results are given in Table VI.

The quotients for federal taxes are from one-third to one-half the quotients for state and local for incomes below $4,000. In the $5,000 income group they are equal, but in higher groups the federal quotients rapidly draw ahead until at the $600,000 level they are eight times as great as the state and local.

The use of Lorenz curves permits a more comprehensive presentation of

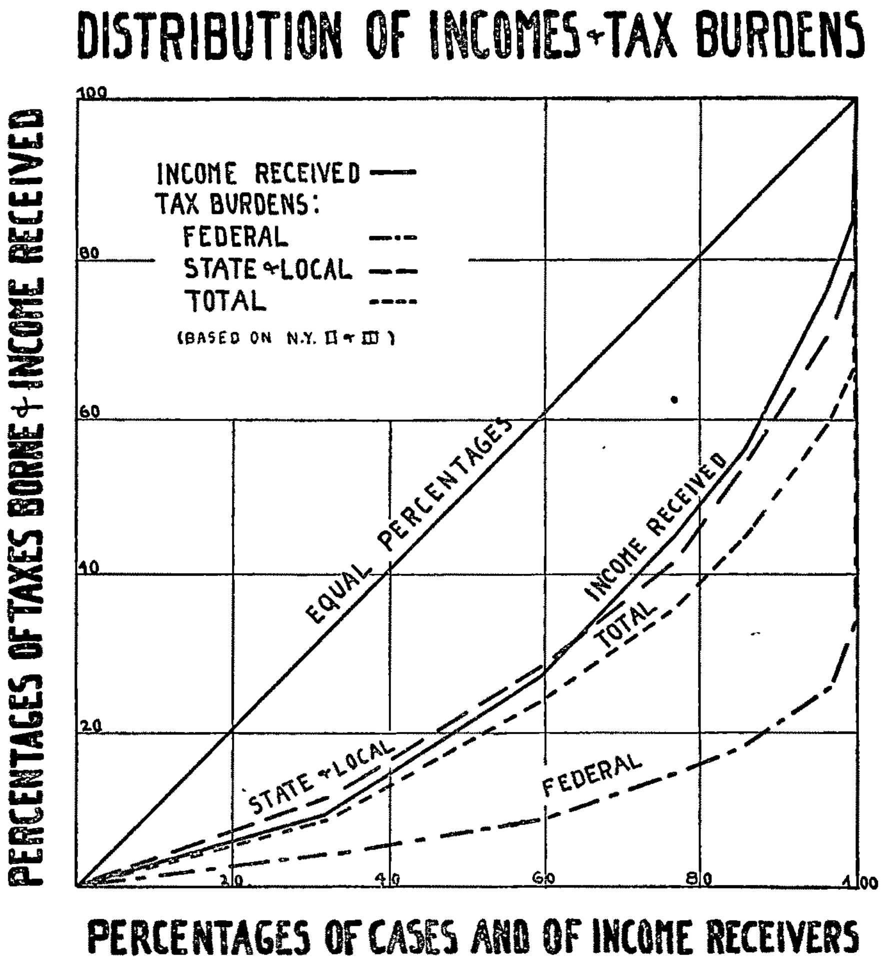
TABLE VI

FEDERAL AND LOCAL TAX BURDENS IN RELATION TO INCOMES

Median income of group	A Per cent national income received	B Per cent federal taxes borne N. Y. II and III	C Per cent state and local taxes borne N. Y. II and III	Quotient B/A	Quotient C/A
500	9.6	3.7	11.9	0.4	1.2
1,000	18.1	5.6	16.7	0.3	0.9
1,500	16.4	4.8	13.7	0.3	0.8
2,000	13.2	4.1	11.6	0.3	0.9
2,800	19.6	7.9	16.9	0.4	0.9
5,000	7.2	8.0	7.8	1.1	1.1
10,000	6.1	11.3	8.1	1.9	1.3
20,000	4.7	19.2	6.1	4.1	1.3
37,000	1.7	8.3	2.0	4.9	1.2
65,000	1.5	7.9	1.9	5.3	1.3
200,000	1.4	13.2	2.6	9.4	1.9
600,000	0.2	3.2	0.4	13.9	1.7
1,000,000	0.3	2.8	0.3	10.4	1.1

the significant comparisons developed in this paper. In Diagram I, there are plotted against the percentage of income receiving units the percentages of (1) income received (2) state and local tax burden (3) federal tax burden, and (4) total tax burden. The line of equal distribution is also given to facilitate visual comparisons. Note first the slope of the curves, and second their horizontal distance from the line of equal distribution. The unequal distribution of income percentages is, unfortunately, axiomatic under modern economic institutions. More startling is the fact that the state and local tax burden line is above that for incomes received for the lowest two-thirds of the cases. That is, those consuming units receiving incomes below approximately $1,500 per year are decidedly discriminated against by our state and local tax system. For greatest justice in taxation the total tax burden line should be much farther below the income line in the lower brackets than it is. The federal curve, while not ideal, is much preferable to

DIAGRAM I



FIGURES FOR DIAGRAM I—LORENZ CURVES
TAX BURDENS VERSUS INCOME RECEIVED

Cum. Cases	Cumulative Tax Burden N. Y. II and III (Per cent)			Cum. income received
	State and local	Total	Federal	
31.6	11.9	9.2	3.7	9.6
59.2	28.6	23.3	9.3	27.7
76.0	42.3	35.8	14.1	44.1
86.1	53.9	45.6	18.2	57.3
96.5	70.8	59.7	26.1	76.9
98.6	78.6	67.6	34.1	84.1
99.56	86.7	75.8	45.4	90.2
99.89	92.8	85.2	64.6	94.9
99.96	94.8	89.0	72.9	96.6
99.99	96.7	92.7	80.8	98.1
100.0	99.3	98.1	94.0	99.5
100.0	99.7	99.1	97.2	99.7
100.0	100.0	100.0	100.0	100.0

the other two. Note that while distance from the straight line of equal percentages is "bad" for incomes, it is "good" for tax burdens. And since distance in this connection is a function of slope, it is good to have the slope of the tax burden line less than that for both equal percentages and incomes received.

The final comparison to be made is that of the state and local burden in New York compared with that in Illinois. Here the distribution of the tax burden depends very much upon the shifting assumptions used. Illinois had a sales tax in 1936, but the state of New York did not. Therefore, if we accept the assumptions of Series I that the sales tax is passed entirely on to the consumer, the burden upon low income groups in Illinois is obvoiusly higher than in New York. If, however, we assume that half of this tax is borne by the merchant (Series II), then the middle income group is hit harder and lower income group gets off relatively easier. Under Series III one-fourth of the tax is assumed to be shifted back to the producer and this hits the low income farmer, since the Illinois sales tax falls upon retail foodstuffs as well as other merchandise. Finally, if one-fourth the land tax is shifted to the final consumer and another fourth borne by the taxpayer while only one-half is capitalized, then the relative burden upon the lower classes is greater in New York where the property tax brings a greater percentage of total state income than in Illinois.

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THE DETERMINATION OF MINIMUM WAGE RATES[1]

Many workers are now protected by federal and state minimum wage laws. The criteria to be followed in determining rates under these laws leave much to personal discretion. Three criteria are provided in the state laws: the minimum necessary for health, the value of services rendered and the rates prevailing for work of comparable character. Yet the complexities of the problem make the search for any definite and simple criteria fruitless. The best guide to follow in setting rates is probably the test of experience. Some statistical investigations of the effects of state minimum wage laws have already been made. Where minimum rates are set well below the median value of wages already prevailing in an industry, few adjustments in employment conditions are occasioned. Where rates approximate or exceed this level, important adjustments occur. Minimum wage rates placed at this high a level may injure the very groups which these laws are designed to aid.

Since validation of the Washington Minimum Wage law by the Supreme Court in March, 1937, activity in this field has been renewed on a broad front. Today twenty-six states, as well as the District of Columbia, Puerto Rico and Alaska, have such legislation; and the federal government, with the enactment of the Fair Labor Standards act, has gained similar powers over industries engaged in interstate commerce or in the production of goods for such commerce. The state laws, except in the case of Connecticut, apply only to women and minors; already about a million women and girls are working under minimum wage orders or flat rate laws. Approximately four million workers, or well over a third of all employed women and children, will receive similar protection when full effect is given to legislation now on the books.[2]

Under the federal law, on the other hand, men as well as women and minors are included, so that many millions of additional workers are covered by its terms. The most recent estimate of the Wage and Hour Division puts the number at approximately 12,600,000.[3] Further minimum wage protection is provided by the Walsh-Healey Public Contracts act, enacted in June, 1936. This Act requires firms accepting contracts with agencies of the federal government for amounts above $10,000 to meet certain maximum hour standards specified in the law and such minimum wage standards as the Secretary of Labor may announce. The industries now covered by contracts of this sort employ nearly five million workers.[4]

I.

The central problem in the administration of this broad program is the determination of minimum rates of wages for a wide variety of industries

[1] This paper was written in connection with a seminar given by Dr. Leo Wolman.

[2] Women's Bureau, U. S. Dept. of Labor, *State Minimum Wage Laws and Orders*, Bull. 167 (1939), p. 2. In 29 state legislatures meeting in 1939, wage and hour bills patterned on the federal statute were introduced. In no case did these bills become law.

[3] Wage and Hour Division, U. S. Dept. of Labor, Release of Oct. 23, 1939.

[4] Public Contracts Division, U. S. Dept. of Labor, Release of Oct. 9, 1938.

throughout the country. In three of the states the original law specifies what the bottom floor to wages shall be. In the other twenty-three, however, provision is made for the appointment of wage boards to study various industries and to recommend rates; on the basis of these recommendations the authorized state agencies issue their wage orders. Among the highest and lowest rates now in effect, oddly enough, are those to be found in Nevada and in Arkansas, two of the three states in which the minimum wages are incorporated in the enabling legislation. In May, 1937, Nevada adopted a minimum rate of $3 per day, while the Arkansas law, passed as long ago as March, 1915, established $1.25 per day as the minimum rate.[5] Wage rates in almost all of the other states lie within the limits of these two figures, their exact amount depending in part on the number of hours taken as the standard working week. A few minimum wage rates exceed 48 cents an hour, as in Oklahoma and the District of Columbia. The majority of the rates, however, fall within a range of 30 cents to 40 cents per hour for a working week of 40 to 48 hours. It is worth noting that about three-fourths of the rates under the state orders are above the 30 cent minimum now in effect under the Federal Wage and Hour law.

Thus far the state wage orders have generally applied to such strictly intra-state enterprises as laundries, cleaning and dyeing establishments, beauty parlors, hotels, restaurants and retail stores. In some instances orders have pertained to firms which ship goods across state lines; a New York minimum wage order, for example, has been issued for the confectionery industry, while Massachusetts has brought electrical equipment and other important manufacturing concerns under its law. Indeed, federal estimates show that about one-third of the million workers now protected by state minimum wage orders or flat rate laws are in industries classified as interstate in character.[6]

All industries coming within the purview of the federal legislation were immediately subject to the basic wage provision of 25 cents per hour for a 44 hour week as specified in the law. A year later, on October 24, 1939, the minimum wage rate was raised to 30 cents per hour; and after the seventh year (*i.e.,* October, 1945) it is to be raised to 40 cents. The maximum weekly hour schedule was reduced to 42 hours after the first year; it is to be lowered again, this time to 40 hours, after the law has been in effect two years.[7] The knotty problem of determining special rates for certain industries still remains, however, since the Administrator of the federal law has been granted the power to appoint industry committees and to collaborate with them in setting minimum wage rates at any figure

[5] Under the Arkansas law, the minimum rate may be revised, but to date no change has been made.

[6] Women's Bureau, U. S. Dept. of Labor, unpublished data.

[7] Payment for overtime is to be 1½ times the regular hourly rate.

above the flat rate contained in the law, but not exceeding 40 cents per hour.[8]

Under these flexible provisions the legislation directs that rates may be set as near to the upper 40-cent–40-hour limit as economic conditions warrant but not so high as to occasion any important curtailment of employment. Different rates may be established for various geographical classifications within an industry if they do not give a competitive advantage to any employer group within the trade. The law provides that where such classifications are made, regional differences and competitive conditions as affected by transportation, living and production costs, are to be taken into account. Minimum wage rates are also to be set with reference to the comparable rates specified in collective labor agreements and with reference to the level of wages paid for similar work in the surrounding locality. These guides to policy give the Administrator and the industry committees appointed by him considerable latitude in determining particular minimum wage and maximum hour rates.

Nine committees have thus far been appointed, all of them in various branches of the textile and apparel trades. The rates recommended by these committees to the Administrator range from 30 cents to 40 cents an hour. In no case to date have geographical differentials been recommended except in reference to Puerto Rican firms in the apparel trade. A number of southern textile manufacturers, however, vigorously requested such differentials for their industry. Only two wage orders are in effect at the time this is being written, the first in the hosiery industry, the second in the textile industry.

Considerable discretion is also granted to those entrusted with carrying out the Walsh-Healey act. True, working hour standards are specified in the Act itself. No firm can secure a contract with the federal government under this law that employs a worker more than 8 hours in any one day or 40 hours in any one week. But the determination of wage standards is largely left in the hands of the Secretary of Labor. The law only directs that wage standards incorporated in public contracts are not to be below the minimum prevailing for similar work in the same locality. Minimum wage rates issued under the Walsh-Healey act to date range from 32½ cents to 67½ cents per hour.

II

As in the case of the federal legislation, the criteria contained in the state laws are open to widely varying interpretations. Almost all of the states having minimum wage laws have established as one criterion the

[8] After 1945, the wage orders of the industry committees are to expire; new orders may be issued after this date, establishing special rates at any level between 30 cents and 40 cents per hour but only under circumstances where the Administrator finds such action necessary to prevent substantial reductions in employment.

minimum amount necessary to provide adequate maintenance and to protect health. In no instance, however, has a wage order met this standard. A study by the United States Department of Labor shows that during the years 1913 to 1927 none of the minimum wage rates, when first announced, quite equalled the official cost of living figures. Furthermore, subsequent price increases during this fourteen-year period made the gaps between standard and practice even wider.[9] Regarding the wage orders of the last few years the cost-of-living standard seems to be a more distant goal than ever; in connection with the state minimum wage orders where data are available, it appears that a considerable majority fall far short of the "adequate maintenance" ideal. In the cost-of-living survey of the New York State Department of Labor it was estimated that a wage of about $1,200 per year was the minimum necessary for health and decency in the case of a woman living alone in New York City. But the minimum wage order issued for the laundry industry, for example, granted a wage of only about $700 to a worker steadily employed throughout the year.[10] In instances of this sort it is clear that the cost of living standard carries little weight and that, in the actual determination of rates, chief attention is given to other considerations.

Another criterion included in twelve state laws, partly to meet constitutional objections, requires that wage boards or administrators in setting particular rates shall take account of the value of the services rendered. Six of these state laws also contain the cost-of-living standard. But unlike the latter, this criterion directs attention to the position of the employer as well as to that of the worker and gives explicit recognition to the fact that from the former's point of view wages are a cost of doing business. Here again, however, is a guide to policy subject to a wide variety of interpretations. In an effort to give it content some states have taken into consideration such factors as the type of work performed, the relation between wage levels of various groups within the industry and the relation of wage costs to plant efficiency and to total costs. Still, considerable latitude remains for the exercise of personal judgment in determining what the minimum wage and maximum hour rates in specific instances shall be.

A somewhat more definite guide to policy contained in eleven state laws directs attention to the wages paid for work of comparable character performed by workers in the same industry or in other industries. Under its terms the introduction of minimum wage safeguards would be called for if the wages of certain unskilled workers, in the canning industry, for example, were found to be below the wages of other unskilled

[9] Women's Bureau, U. S. Dept. of Labor, *The Development of Minimum Wage Laws in the U. S., 1912 to 1927,* Bull. 69 (1928), p. 155.

[10] New York State Dept. of Labor, *Adequate Maintenance for Women Workers in New York State,* Jan., 1938, p. 22, and *Wage Order for the Laundry Industry;* March, 1938.

workers in the surrounding locality. Yet even the definition of this standard is difficult and the problem of measurement is not an easy one. Just what is meant by the phrase "work of comparable character" is by no means clear in every case. Nor is it easy to compare the wage levels of different groups of workers if consideration is given to the weekly or monthly earnings actually received and to other differentiating circumstances.

It is open to doubt, moreover, how much weight this criterion deserves. Thus, even though the wages of a certain group of workers are found to be equal to those paid to others doing similar work elsewhere, the surrounding circumstances may still warrant an increase; for it is entirely possible that the same influences that have reduced the wages of the first group to unduly low levels have likewise reduced the wages of these other workers to the same extent. On the other hand, this guide to policy would be carried too far if, regardless of other considerations, the wages of a particular low paid group were raised to the level that prevailed for workers engaged in comparable work elsewhere; under such circumstances employers might more than offset the rise in hourly rates by reductions in the weekly or monthly pay checks of their workers.

III

These considerations indicate some of the complexities of the problem and suggest that no single formula will prove to be an adequate guide to policy. Differences in the positions of working groups and of employers, differences in the characteristics of industries, changes in the level of business activity and in business prospects—all these considerations and many others are pertinent to the problem and make the search for any simple criterion or set of criteria fruitless. As a matter of necessity, therefore, the guideposts to policy reviewed above can do no more than specify the general limits within which particular decisions are to fall. Within these broad limits attention must be paid to a wide variety of factors before specific rates of minimum wages and maximum hours can be set. Actually, the task still remains of formulating an approach to the administration of minimum wage laws that will conform to the accepted standards of policy and at the same time will provide a means for coping with the multiplicity of factors involved.

It is apparent from the foregoing that the problems involved in setting minimum wage rates are highly dynamic in character. It is important, then, to work out some sort of reconciliation between the need for flexibility in minimum wage programs and their traditional rôle of guaranteeing a fixed wage to the lowest paid groups. Changes in rates would, of course, be necessary to offset movements in the general price level. Rate revisions to adjust for fluctuations in the volume of business activity and for changes in the circumstances under which competing employers operate would also

be required. Finally, aside from any changes of this sort, outright errors in setting rates would probably occur. Even under conditions of relative stability, calculations of the effects of particular minimum rates on employment conditions might easily go astray. Here again, revisions would be in order. In other words, the important issue is not whether rate determinations will have to be changed, but whether the particular rates requiring change can be quickly detected and the necessary adjustments made. The problem of revising minimum wage and hour rates, indeed, appears to be of only somewhat less importance than the problem of setting rates in the first instance.

To formulate an approach to the problem of determining rates under minimum wage laws which will make it possible to take account of the complexity of factors involved and which will also be useful in indicating where adjustments in rates are called for, is an exacting task. The approach most likely to meet these two requirements successfully is the pragmatic one. Under this view the chief guide to policy, wherever possible, would be the test of experience. The traditional goals of minimum wage legislation would be sought but not at the cost of serious disturbances in the markets for labor. An important objective would be, therefore, an understanding of the various circumstances under which particular wage and hour rates occasion dislocations in industry. In method, this approach would rely chiefly on the statistical inquiry. Data would be gathered, for example, on the movement of wages following the application of particular rate decisions, the number and type of workers subsequently released from employment and the changes in the earnings of the employers involved.

As our knowledge broadened along these lines, substantial aid would be given in determining new rates and in revising rates already in effect. The infinite variety of circumstances surrounding the application of specific minimum rates would make it difficult, of course, to interpret findings; differences in business conditions and in the positions of individual concerns would make it especially hazardous to relate such findings to the determination of new rates. In the case of the federal law the varying circumstances affecting competing employers in different areas would make the task a particularly difficult one. Yet there appears to be no other approach to the problem which holds out more hope for success.

In any effort to reconcile the need for flexibility in minimum wage rates with their traditional rôle of guaranteeing a basic wage to the lowest paid workers, statistical inquiries of this sort would play a very useful part. On the one hand, such investigations would help reveal cost of living changes that might call for readjustments in the minimum rates. On the other hand, they would throw light on changes in the volume of employment and in the earnings of particular worker groups that might warrant revision of wage orders already issued. Students of minimum wage legislation, whether

friend or foe, would welcome inquiries of this sort. Wage law administrators, whether they felt that workers were receiving too little protection or too much, would be interested in their findings.

IV

Happily, surveys conducted by certain government agencies have already made some contributions along these lines. The labor departments of at least fourteen states have collected data on employment conditions existing before and after the application of specific minimum wage orders; and the Women's Bureau of the United States Department of Labor has made investigations of a somewhat broader scope.[11] In view of the limited coverage of these surveys, their findings only suggest certain hypotheses which later studies may affirm or deny. Reference to a few of the conclusions which can be drawn from these investigations, however, will at least throw light on the approach to the problem of determining minimum wage rates suggested above.

In reviewing these surveys it is useful to consider the relation of minimum rates established by wage orders to the level of wages prevailing in the industries concerned. When placed at a point well below the median value of wages, minimum wage rates apparently have had few important effects. In Kansas and Minnesota, for example, most of the minimum rates issued during the years 1918-1922 were 30 to 50 per cent below median earnings. Subsequent investigations showed few adjustments occurred in these industries. True, the earnings of workers in the lowest quarter of the wage-earning groups increased somewhat following the application of the minimum wage orders. On the other hand, only a few violations were reported, suggesting that employers experienced little difficulty in conforming with the law. Furthermore, the wages of the higher paid groups were not visibly affected by these minimum wage decrees, suggesting again that if disturbances did occur, they were not of a far-reaching character.[12]

Under circumstances where minimum rates have approximated median wages already in effect, however, definite adjustments seem to have been inescapable. During the war years and immediately after, California estab-

[11] The investigations on which this study is based were made by the labor departments of the following states (in addition to the District of Columbia): Arkansas, California, Illinois, Indiana, Kansas, Massachusetts, Minnesota, New Hampshire, New York, Ohio, Oregon, Rhode Island, Washington and Wisconsin. Except in a few instances they fall either in the period 1915-1925 or in the period 1933-1937; in scope they are generally limited to the laundry, mercantile and manufacturing industries. Investigations by the Women's Bureau of the U. S. Dept. of Labor in the canning industry in California and New York, in the boot and shoe industry in Massachusetts and twelve other states, in the laundry industry in New York and Pennsylvania and in the dry-cleaning and dyeing industry in Ohio and Indiana have also been utilized.

[12] Women's Bureau, U. S. Dept. of Labor, *The Development of Minimum Wage Laws in the U. S., 1912 to 1927*, Bull. 61 (1928), pp. 344-345, 363-364.

lished minimum wage rates only slightly below prevailing median rates and earnings; the District of Columbia during this period specified rates somewhat above this level. Following the announcement of wage orders in both of these jurisdictions, wage figures for workers in the lowest quarter earning group showed a marked rise. Many employers, moreover, were unable or unwilling to comply with the terms of the wage orders, for at least a fourth of the workers in these two areas were subsequently found to be receiving pay below the specified minimum. The movement of wage rates and earnings of the higher paid groups also bears out the contention that minimum rates, when set at this level, have occasioned important adjustments. Median wages both in California and the District of Columbia showed immediate increases wherever minimum wage orders were put into effect; and, during the years 1914 to 1925, these median rates mounted much more rapidly than the comparable rates in states having no minimum wage laws. Even the wages of workers in the highest quarter of the earning groups were apparently affected by the minimum wage orders, for in most cases wage rates and earnings of these workers moved in proportion to changes in the minimum wage rates, in contrast to their erratic behavior in Kansas and Minnesota where much lower minima had been established.[13]

Surveys of more recent experience point to the same conclusions. Investigations by state labor departments and the United States Women's Bureau have been made in seven states where the minimum rates have approximated or exceeded the median rates of pay prevailing in the several industries for which wage orders were issued.[14] All show that the wage rates and earnings of the lowest paid workers, following the wage orders, rose substantially and that median wages increased in about the same proportion. Moreover, adjustments made subsequent to the announcement of the minimum wage orders involved the highest paid groups as well. Wherever the government surveys secured data on this aspect of the problem it was found that the wages of the highest quarter earning group had increased in sympathy with the general rise in rates.

Where minimum rates have been set at this level, then, employers have generally faced important changes in their labor costs. Whether these changes have involved serious dislocations, however, is another matter and far more difficult to ascertain. One test would be the number and type of workers subsequently released from employment. Where minimum wage rates have approximated or exceeded the median level of rates already prevailing, no significant displacement of women workers has thus far been

[13] Women's Bureau, U. S. Dept. of Labor, *ibid.*, pp. 337-343. In the case of the District of Columbia, the data have only a limited coverage since a court suit, testing the law's constitutionality, was introduced in 1921.

[14] Surveys of selected industries, to which reference is made here, were conducted in California and Massachusetts for the years 1920-1930 and in Illinois, New Hampshire, New York, Ohio and Rhode Island for the years since 1933.

found.[15] A study of employment changes in California between 1920 and 1930 shows that in industries covered by minimum wage orders the proportion of women workers to the total grew more rapidly than in the same industries for the country as a whole.[16] In a sample study of 14 New York laundries and 11 Pennsylvania laundries it was found that the proportion of women workers during the period 1933 to 1935 increased in the former state where a wage order was in effect and actually declined somewhat in Pennsylvania where there was no minimum wage law.[17] In Ohio, wage orders established minimum rates substantially above the median level already in effect, but even here surveys covering the period 1934 to 1937 show no noticeable displacement of women workers.[18]

But little really is known about this phase of the problem and subsequent studies may drastically alter these conclusions. Surveys of changes in employment, in company earnings and in the rate of mortality of concerns brought under minimum wage laws may throw a different light on the circumstances under which minimum wage orders occasion serious disturbance. Similarly, if account were taken of influences associated with the varying phases of the business cycle or with such differences between industries as the relative importance of labor costs, perhaps the picture would be considerably altered.

Our knowledge of the effects of rates established under the Federal Wage and Hour law is even more limited. In this connection, of course, sufficient time has not yet elapsed to make the necessary inquiries. Federal authorities, for example, estimated that the wages of almost 700,000 workers were raised in October, 1939, when the minimum wage rate under the federal law was increased from 25 cents to 30 cents an hour; similarly, the reduction in maximum hours from 44 to 42 hours per week was said to have affected the hour schedules of about 2,400,000 workers.[19] These estimates, however, were nothing more than predictions of probable effects; it remains to be seen how accurate they were.

V

From the foregoing review of studies concerning the effects of minimum wage legislation, these tentative conclusions may be drawn. Where minimum wage rates are set as low as 30 per cent below the median level of wages already prevailing in the industries concerned, no important adjustments in employment conditions are likely to occur. On the other hand, where minimum rates approximate median wages, some far-reaching ad-

[15] It is important to note that these surveys cover years of general business expansion.
[16] Women's Bureau, U. S. Dept. of Labor, *The Benefits of Minimum Wage Legislation*, March, 1937, p. 8.
[17] Women's Bureau, U. S. Dept. of Labor, *ibid.*, p. 11.
[18] Women's Bureau, U. S. Dept. of Labor, unpublished data.
[19] Wage and Hour Division, U. S. Dept. of Labor, Release of Oct. 23, 1939.

justments in the labor costs of individual employers may be expected to follow. Where minimum rates are placed above this level, the likelihood of serious disturbances is increased; indeed, it would not be surprising to find the application of minimum wage laws under these circumstances serving to defeat the very purpose for which the laws were originally enacted. It remains for further investigations to test and to amplify these conclusions. Amid the difficulties and uncertainties besetting the administration of minimum wage programs, it is apparent that such investigations can play a helpful part. It is to be hoped, therefore, that governmental authorities will not be backward in undertaking additional statistical inquiries along the lines of those already completed.

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CONCENTRATION OF JOINT-STOCK ENTERPRISE IN ITALY

In terms of absolute and relative proprietorship, joint-stock company enterprise appears to have become increasingly important in the Italian economy since 1914. More significant is a marked concentration of corporate wealth. In 1922 the 100 largest non-financial corporations owned less than a third of all non-financial corporate assets; by 1936 the 100 largest firms owned almost half of such assets. The trend toward concentration has been even more pronounced in the field of banking. It is to be noted, however, that political centralization of economic controls in recent years has come to overshadow the significance of authority resting on formal ownership.

In one of his leading speeches on the Fascist Corporate State, Premier Benito Mussolini undertook to give his listeners "a broad outline of the history of capitalism during the past century."[1] This required a definition:

> Capitalism . . . is a specific mode of production, a system of industrial production. Capitalism in its most highly developed form is a mode of mass production for mass consumption, financed in mass through the national and international issue of joint-stock capital.

The touchstone of "advanced capitalism," then, is large-scale industrial and financial joint-stock enterprise. In the course of his address, the Duce asked: "Is Italy a capitalistic country?" and replied:

> If by capitalism is meant that complex of usages, customs, technical progress now common to all countries, we can say that Italy too is a capitalistic country. But if we go more deeply into the matter and examine the situation from a statistical standpoint . . . we then secure data that enable us to say that Italy is not a capitalistic nation in the current sense of the word.

He cited statistics on the economic structure of the Italian population, indicating a *numerical* predominance of agricultural and small industrial enterprises. "You see at once from this survey how varied and complex is the Italian economy, and why it cannot be identified with any one type; especially so as the 523,000 manufacturers are almost all at the head of small or medium-sized concerns." That is, in Mussolini's opinion Italy is not "capitalistic" because small-scale (and presumably non-corporate) enterprise is numerically outstanding in its business-industrial system.

Unfortunately, the paucity of data on national wealth and income—and, furthermore, on the employment and production of corporate and non-corporate enterprises—makes it difficult to throw a direct and completely revealing light on the significance of joint-stock companies in the Italian economy.[2] The available information, however, indicates that large-scale corporate enterprise is by no means unimportant. Certainly, in

[1] Speech to the National Council of Corporations, November 14, 1933. See Benito Mussolini, *The Corporate State*, Florence, 1936, pp. 11, 18-19.

[2] The terms "corporate" and "corporation" are herein used as equivalent to "joint-stock" and "joint-stock company," not in their current Italian usage with reference to certain fascist institutions.

Mussolini's terms, Italy was more "capitalistic" in 1933 than in 1922, when he took office.

The number of joint-stock companies in Italy has risen as follows: 1913—3,069; 1922—6,850; 1927—13,201; 1932—18,518; 1937—20,018.[3] According to the statistician Corrado Gini, the aggregate national wealth (in current lire) was 111 billions in 1914, and 550 billions in 1925.[4] This represents a rise of about 400 per cent. On the other hand, the total nominal "share capital" of the corporations increased from 5.3 billions in 1914 to 36.5 billions in 1925—that is, by about 600 per cent.[5] During 1927-1934 Italy passed through a severe depression. No comparable estimates of changes in national wealth during this period are available, but it is altogether reasonable to infer that it was smaller in 1934 than in 1925.[6] Yet corporation capital was greater: it rose from 36.5 billion lire in 1925 to 52.3 billion in 1930, contracting to 44.3 billion in 1934.

How large a proportion of the national wealth is controlled by corporate business enterprise? This question cannot be answered with precision, inasmuch as the total of company assets includes an indeterminate volume of inter-corporate obligations. But it is evident that such control has expanded considerably since the onset of the World War. In 1914, some 808 non-financial corporations reported their assets and liabilities to the Italian Association of Joint-Stock Companies. Their total capital was 2,892.5 million lire—which was approximately 60 per cent of the capital of *all* non-financial corporations, reporting and non-reporting—and their total gross assets were 6,126.1 million lire.[7] The assets of non-reporting

[3] Istituto Centrale di Statistica . . . , *Annuario Statistico Italiano,* various issues, 1914-1938 (Rome, 1914-1938).

[4] Constantine E. McGuire, *Italy's International Economic Position* (New York, 1927), pp. 445, 451.

[5] Istituto Centrale di Statistica, *op. cit.* Gini estimates that the real wealth was approximately the same in the two years. That is, the 400 per cent rise was almost entirely in money terms. To what degree did corporation capital reflect the depreciation of the lira? It seems unlikely that upward adjustments in nominal capital *preceded* advances in the index of living costs (used by Gini as the deflating factor).

[6] That is, in current lire. It is possible that the national wealth was smaller even in "real" terms. The wholesale price index (1913 = 100) fell continuously from an average of 646 in 1925 to 276 in 1934; the general index of industrial production (1922 = 100) rose from 156.6 in 1925 to 201.8 in 1929, declined to 145.9 in 1932, then rose to 182.2 in 1934; the general index of agricultural production (1922 = 100) rose with some interruptions from 129.1 in 1925 to 147.8 in 1934; the index of railway freight traffic (1922 = 100) rose from 148.3 in 1925 to 154.2 in 1929, then fell to 85.4 in 1934; the number of persons totally unemployed rose continually from 110,298 in 1925 to 1,018,953 in 1933, declining to 963,677 in 1934. *Cf.* W. G. Welk, *Fascist Economic Policy* (Cambridge, 1938), *passim.*

[7] Associazione fra le Società Italiane per azioni, *Notizie Statistiche, 1922* (Rome, 1923). All data on "reporting" companies are computed from this and subsequent issues of the *Notizie Statistiche.* Financial companies—banks, insurance firms, etc.—have been excluded from the present estimate, in order to minimize duplication of assets.

companies are unknown; however, sampling tests suggest that the capital-assets ratio of reporting companies is about the same as that of non-reporting companies.[8] Assuming this to be correct, it appears that gross assets of all non-financial companies in 1914 totalled about 11.1 billion lire. This represents 10 per cent of the national wealth in 1914. A similar computation indicates that in 1925 non-financial gross assets represented about 16 per cent of the national wealth. By 1933, the gross assets of reporting non-financial companies were 29 per cent greater than in 1925—this in the face of reduced national wealth. A conjecture that 20-25 per cent of the national wealth in 1933 was owned by joint-stock companies does not seem to be extravagant. Oblique as is such information on national and corporate wealth, there can be little doubt that there has been an impressive growth, both absolutely and relatively, of corporate enterprise in Italy during the past twenty-five years.

More significant—and also more pertinent to the Duce's conception of capitalism—is a marked concentration of corporate wealth under the command of a few large firms. This may be measured in terms of the capital and assets of the 100 largest[9] corporations in 1922, 1926, 1933, and 1936. These 100 companies held the following percentages of the total capital and gross assets of all non-financial corporations reporting to the Association:[10]

Year	*Percentage of reported non-financial capital*	*Percentage of reported non-financial assets*
1922	44.1	41.6
1926	45.2	46.1
1933	50.7	53.7
1936	53.3	55.8

In accordance with the method of computation outlined above,[11] the percentages of total capital and gross assets of *all* non-financial corporations, reporting and non-reporting, which were held by the 100 largest companies may be estimated as:

[8] On the assumption that non-reporting companies are typically small (in terms of capital), a sample of reporting companies with small capital was examined in respect of the capital-assets ratio.

[9] "Largest" in respect of gross assets.

[10] In the two fiscal years 1935 and 1936, the reported net profits of corporations were far higher than in any of the preceding years. Yet 99.7 per cent of the companies earned only one-third of this revenue. The remainder went to 56 great corporations, which controlled about 40 per cent of all reported capital. Istituto Centrale di Statistico, *op. cit.*, 1937, 1938.

[11] *Cf.* Note 8. It may be observed that in 1936 the capital of reporting non-financial companies amounted to about 83 per cent of the capital of all non-financial corporations.

Year	*Percentage of all non-financial capital*	*Percentage of all non-financial assets*
1922	33.2	31.5
1926	36.1	35.4
1933	38.6	40.8
1936	44.7	47.0

Large business enterprises are of course more important in some fields than in others. In 1936 the 100 biggest non-financial corporations were distributed in various industries as follows: electric power, 30; metallurgy, 9; chemicals, 8; textiles, 7; machinery, 7; telephone service, 5; shipping, 4; automobiles, 3; shipbuilding, 3; construction and building materials, 3; sugar refining, 3; real estate, 3; petroleum, 2; water, 2; railways, 2; gas, 2; rubber, 2; matches, 1; paper, 1; cable, 1; distilling, 1; retail merchandising, 1. Except for the textile (other than rayon), water, railway, real estate, and merchandising firms, these companies seem to be dominant in their respective fields, at least as regards ownership of assets.[12] On the other hand, corporate enterprise of even moderate size is apparently quite unimportant in the fishing, wood-working, food-processing, and clothing industries, and in the retail trades.[13]

There has been a similar trend in the financial field. In each of the four years since 1921, the three leading commercial banks held the following percentages of all reported banking capital, gross assets, and deposits:[14]

Year	*Percentage of reported banking capital*	*Percentage of reported banking assets*	*Percentage of reported deposits*
1922	24.0	41.9	32.9
1926	37.5	44.8	26.4
1933	49.2	64.4	44.8
1936	56.1	67.1	50.4

The total number of reporting banks declined: 1922—228; 1926—250; 1933—109; 1936—94.

[12] Eight great companies owned 54 per cent of the assets held by all the 160 electric-power firms; 4 of the 83 metallurgical companies owned 57 per cent of the assets; 7 of the 195 mechanical companies owned 51 per cent of the assets; 2 of the 46 automobile companies owned 57 per cent of the assets; 2 of the 15 sugar-refining companies owned 65 per cent of the assets; 1 of the 13 rayon companies owned 64 per cent of the assets; 1 of the 9 rubber companies owned 73 per cent of the assets. Associazione . . . , *op. cit.*

[13] In 1927, these industries and trades employed about 40-45 per cent of all industrial and commercial workers; moreover, about 75 per cent of such workers were connected with firms employing ten or fewer persons. More recent data are not yet available. *Annuario Statistico Italiano, 1937*, pp. 68, 70.

[14] Associazione . . . , *op. cit.*

On levels other than corporate ownership—that is, on personal and bureaucratic levels—business controls appear to have been concentrated even further within the past fifteen years. Discussion of the forces involved in economic centralization in Italy is beyond the scope of this paper.[15] It may be noted, however, that the cumulative political integration of economic authority in recent years has come to overshadow the significance of control based on formal proprietorship.

Large corporations, then, have played an increasingly prominent rôle in Italian economic life since the advent of fascism. By 1936, 100 great manufacturing, communications, and trading companies—a mere half of one per cent of all joint-stock firms—owned almost half of all non-financial corporate assets. Concentration was even more pronounced in the field of banking. Evidently the fascist environment has not been uncongenial to the growth of large-scale business organizations.

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[15] See the writer's *The Corporate State in Action* (New York, Oxford Univ. Press, 1939).

THE RELATION OF AMERICAN FOREIGN-TRADE POLICY TO NEW DEAL DOMESTIC POLICY

Paper presented at a Round Table Conference of the American Economic Association, December 27, 1939.

The comparison of American foreign-trade policy and New Deal domestic policy is only superficially a question of economic policy in the narrow sense. Economists tend to approach these problems as if they were questions of trade barriers in the international field and of price rigidity and monopolistic tendencies in the domestic field. Essentially autarchic tendencies in foreign trade and monopolistic tendencies in domestic markets are political responses to a shift in the social framework of the market. Traditional economics tends to assume the constancy of this social framework, and then proceeds to a refinement of its analysis within the postulated constancy. Present problems arise because the framework of custom, values and law is shifting. Economics has become increasingly exact in its formulations, and at the same time increasingly irrelevant to the social process it claims to study. The essential problems today are: Is the social framework still a constant? and if not, what difference does it make in the discussion of relevant policy? Until these questions are explicitly faced, divergent policies in international and domestic markets will be argued with heat but without light, because the traditional postulate of the economist—the constancy of the social framework—eliminates the area in which the real problems arise.

A discussion of the relation of American foreign-trade policy to New Deal domestic policy must be based upon a clear understanding of the nature of the two policies which are in comparison.

There is little difficulty in a statement of our present foreign-trade policy.[1] Essentially it is designed to broaden trade by a process of negotiation of trade agreements with other countries to reduce trade barriers. The objectives are both economic and political. No discussion of the economic objectives is required before an audience of professional economists—there is no proposal in the field of economic policy for which so nearly unanimous support can be found in the profession. The political objective—the development of an atmosphere in international relations in which peaceful intercourse between nations becomes somewhat more probable or possible—is open to more serious doubt. Few will question the objective itself; but qualified students of international relations might well wonder whether an expansion of international economic intercourse which was not accompanied by a strengthening of the international political and juridical framework in which the trade relations will develop, might not rather easily promote a variety of international contact that might lead to international conflict, if no provisions were made at the same time for mechanisms and institutions of adjustment which would render such conflict harmless from the standpoint of the preservation of peace. Mr. Raymond Moley defined "the twin objectives of the New Deal" as "the application of intelligence and goodwill to the solution of our domestic problems, and the avoidance of foreign entanglements."[2] A program to reduce trade bar-

[1] Francis B. Sayre, *The Way Forward* (New York, Macmillan, 1939); W. S. Culbertson, *Reciprocity* (New York, Whittlesey House, 1937); R. L. Buell, *The Hull Trade Program and the American System* (New York, Foreign Policy Association, 1939).

[2] *Sat. Eve. Post,* Aug. 26, 1939.

riers that was accompanied by a simultaneous policy of "avoidance of foreign entanglements" was clearly destined to lead to vigorous discussion and dissension within the initiating group as soon as matters were thought through their elementary stages. We need not be surprised to read in Mr. Moley's memoirs that the secretary of state who negotiated the trade agreements "personified the philosophical opposition to New Deal policies."[3] No one who represented the nationalist alternatives of N.R.A. and A.A.A. could possibly have reasoned otherwise. After the failure of N.R.A. the effort on the part of some of the administration advisers to restore competitive controls by a re-invigoration of anti-monopolist measures, was destined to widen this division.

It is harder to characterize the New Deal domestic policies than the present foreign-trade policy. It may well be questioned whether a domestic policy exists—or ever existed. Max Lerner, who may be assumed to take a fairly sympathetic attitude toward the congeries of interests—ideological, material and otherwise—that are usually described in political shorthand as "the New Deal," recognizes at least eight schools of economic thought among its advisers;[4] but a professional economist might well question this observer's competence to analyze such problems, for he is capable of such economic monstrosities as the statement that "economists still cling to the theory of comparative costs, although the world is covered with tariffs,"[5] which makes about as much sense as a statement that physicists still talk of gravitation although the sky is full of airplanes.

Perhaps the best way to characterize the domestic economic policy of recent years is to describe it as piecemeal protection of a succession of producers' interests. Formerly—in the case of the Interstate Commerce Commission and of the Federal Trade Commission, for instance—the object of public policy was the protection of the consumer. In view of the general purpose underlying such regulation, it could not so easily deteriorate into the protection of special groups. The new regulatory devices have not been designed to hold the scales even, but they have been deliberately contrived to protect specified producers' interests. The agricultural controls are administered to protect the farmer. The wages-and-hours administration is supposed to raise wages. The Wagner act machinery is charged with the protection of collective bargaining. Even the I.C.C. has degenerated into an agency to protect railroad labor and railroad bondholders. In other words, the special-interest principle of the protective tariff has been generalized. In so far as consumers' interests are envisaged at all, they come in indirectly through the supposed reverberations of the protected producers.

[3] *Sat. Eve. Post,* July 8, 1939, p. 71. See also R. Moley, *After Seven Years* (New York, Harper, 1939). For similar argument, see Book 1 of Jerome Frank, *Save America First.* (New York, Harper, 1938).

[4] *It Is Later Than You Think* (New York, Viking, 1939), pp. 156-8.

[5] *Ibid.,* p. 11.

This gives us a good point of departure for our comparison of foreign trade and domestic economic policy. If the general welfare should be the purpose underlying economic policy, we might well ask whether that general interest should not be directly envisaged instead of merely assuming that we can promote it most effectively by the indirect method of protection of one producers' group after another. Isolated policies can best be tested for their effect on society as a whole by an investigation of their consequences to the consumer. By a curious twist of history our present foreign-trade policy is the only major exception to the general trend of determining national policy by concessions to specific producer groups. The present trade agreements program submits every special interest plea to the test of its compatibility with a general interest of the economy as a whole. In America tariffs were the first major curb on freedom of enterprise. Historically, the movement toward curtailment, subsidy, and monopoly took much of its impetus from the drift toward "protection" of national producers in a world market. From this standpoint the effort to "free" trade from some of its worst tariff shackles seems to be the last effective defense of free enterprise and free markets.

The significance of the trade agreements policy as a measure to insure the flexibility and even the viability of our free economic institutions is generally overlooked. Too frequently attention is restricted to the areas in our economy that are immediately involved in foreign trade and no significance is attached to the mis-direction of economic energy which is prevented by the potential competition of world markets that emerges as a possibility as soon as certain limits imposed by trade barriers are exceeded. The mere fact that free contact and comparison with a world market is maintained with economic calculation continuously devoted to the possibility of entering it, or of switching from one external market to another, has—as Professor Wilhelm Röpke has recently expressed it—a value for the rational functioning of national economics which no juggling of statistical data can possibly elucidate or obscure.

Whereas the *actual* world trade . . . works like a hormone or a vitamin, the biological value of which is quite out of proportion to the active quantity, the *potential* world trade considered here may be compared to a catalyst in a chemical process which does not enter into the compound at all while being the *sine qua non* of the process itself. It is acting, like the British fleet, "in being," and what this means will be discovered only when it can act no more.

The *morphological importance of potential world trade,* it must be admitted, is a rather vaporous subject which it is very difficult to handle without drifting into empty speculation; but that it is here and that it deserves the greatest emphasis cannot possibly be denied either. It would be easy, moreover, to show that it is really nothing more than a special case of a general phenomenon pervading the whole economic process and to name examples in other fields where it has been much better recognized than in this special field of economic theory. It seems certain that a careful and sober analysis of this subject would yield a number of

interesting results, and it is also to be hoped that it would help to bring some fresh air into the somewhat stuffy atmosphere of the traditional theory of international trade, which is still too much centering around the hoary quantitative-mechanical notions of the classical school. In such an analysis much stress would have to be laid on the fact that the terms of "potential world trade" cover also all those concepts like "confidence," "expectation," "elasticity," "continuity" and "security" which are so much at the forefront of present-day economics. Especially worthy of consideration seems to be, in this context, the question of what the potentialities of world trade mean for the incentives to that private investment activity, at home and abroad, which plays such a conspicuous and well deserved rôle in contemporary economic thought as the prime condition of the optimum equilibrium of economic life.[6]

Relatively low foreign-trade figures in a free market may therefore go together with extremely great significance to the health of the economic structure as a whole; and, conversely, relatively high foreign-trade figures based on autarchical "bargaining" may simply conceal the fundamental decay of world markets because they may represent a foreign extension of domestic economic controls rather than a growth of the interwoven structure of world economy. These are, of course, precisely the reasons why policies leading to the reduction of trade barriers are fought tooth and nail by the beneficiaries of the special interest policies that are now so widely prevalent throughout the world, and fought most eloquently by spokesmen for "free enterprise" who apparently suffer no intellectual indigestion from the simultaneous support of expansion and restriction of markets.

Thus far this paper has followed rather conventional lines. The topic assigned to me is a broad discussion of economic policy, however, and it gives me an opportunity to widen the area under study to include some factors that have convinced me that the analysis is valid but does not go far enough.[7] It is apparently true—as the old saw goes—that economists win all the arguments, and protectionists the elections, with the gratifying exception of the current Cordell Hull period and even there threatening political clouds obscure the horizon. In the current intellectual tradition this is usually dismissed with a sigh about the gullibility of the great unwashed, while we retire to the safe battlegrounds of the classroom smugly confident of the purity of our logic. The twin devils of "propaganda" and "ignorance" are under comfortable control in the ivory tower and here the election returns filter through a qualitative grading system. To a social scientist worthy of the name, this should, however, suggest that our fundamental hypothesis might be too limited for the scope of the problem—our logic may be as perfect as we think it to be but the framework in which we are applying it may be too narrow to lead us to practically significant results.

[6] W. Röpke, *Interim Report on International Economic Disintegration* (mimeographed).

[7] See my recent papers in *The Proceedings of the Institute for Administrative Officers of Higher Institutions,* vol. x, 1938 (Univ. of Chicago Press); and the *Proceedings of the Conference on the Problems of Higher Education,* 1939 (University of Illinois Press).

It may be quite as silly to discuss economic nationalism and its political accompaniments in terms of its economic irrationality, as it would be to treat insanity as a problem of crooked thinking to be cured by the teaching of logic.

For the past three centuries we have been able to take for granted the social framework in which we carried on our economic activity. We inherited our law and our religion—and "change" in such matters was slow, almost imperceptible. We inherited private property and the family system, as well as our attitudes toward our monetary institutions and the ethical foundation of contract. Our economic policy—as well as our economic thought—could be passive about such matters, although there was an awareness in the *political* economy of men like David Hume, Adam Smith and John Stuart Mill of the significance of these assumptions which is sadly lacking in contemporary "economics." Occasionally a particularly keen observer like De Tocqueville would draw attention to the fact that the loosening of political ties—which was his negative way of describing our economic and political freedom—was possible only if strong moral bonds continued to exist.

The strong moral bonds have not continued to exist—and this is the basic fact to emphasize in the current drift to authoritarian government. The feudal and religious code have gradually become too weak a bridge to carry the traffic—and the impersonal division of labor which was the main cause of the new productivity of human economic effort contributed mightily to the decline of the prevailing cake of custom. The result is that the social framework cannot any longer be regarded as a constant —and the social and economic theory that was based on this assumption, has therefore lost its immediate relevance.

Some contemporaries advocate deliberate indoctrination of some *ism* of either a conventional character such as "the American way" or of a more venturesome nature such as one of the fifty-seven varieties of collectivism as a remedy for the difficulty. Here again the basic cause of contemporary difficulty is overlooked. Merely baking ourselves back into some new cake of custom will not remove the distress caused by the cracks in the comfortable crust of convention that covered our routine in the past. For the new cake of custom will give way before the same forces that subverted the old—and the social indoctrinators do not propose to do anything about these forces which are inevitably interwoven with the drift of social policy throughout the world today.

What are these forces? Essentially they all spring from our predominant modern preoccupation with increased material standards of living, with our constant drive toward increased productivity. All our twentieth-century political faiths agree upon this objective and it is frequently envisaged as an end in itself. In the United States, New Deal Democrats

as well as their more conservative brethren in and out of their own party agree upon this objective. Disagreements are a matter of means to achieve this end. Similarly fascists and communists are lyrical in their description of the "waste" of laissez-faire democracy, and here, too, basic agreement upon ends exists, although it comes in sidewise in fascism because of the emphasis on a war-economy. Now increasing productivity—generally accepted as an *end*—precludes the choice of certain *means* and inevitably leads to the selection of others. The social by-products of these means constitute our problem.

Productivity as a social *end* means specialization and division of labor as *means*. It means heavy stress upon the rational and impersonal and it means continuous undermining of the traditional, the social, and the other-than-intellectual. To be sure, the more specialization, the greater the need for careful coördination of the specialists.[8] The specializing—*i.e.*, the differentiating—aspect of our activity is, however, constantly stressed in our day-by-day effort of earning a living, while the coördinating—*i.e.*, the fitting into a common framework—is impersonal and takes place through abstract devices like a price system or the technique of an administrative bureaucracy. These observations hold for consumers as well as for producers, and throughout there is emphasis on doing only one thing and on leaving other aspects to the respective specialists assigned to the matter. This goes even to the extreme where values themselves become a specialty of the clergy or the secular professor of ethics, while the togetherness of ends-and-means becomes a stepchild of all disciplines. In recreation—the very recognition of "recreation" as a separate activity is characteristic of the system—we tend to passivity. We listen, look, and thrill at the activities of specialists, and a general "spectatoritis" develops in these fields. The sense and value of participation has disappeared, and more and more people use only one small part of their potential human equipment. Abstract and impersonal relations predominate, and the general decline of intermediate social groups, of the family, and the church

[8] In education a parallel is found in the heavy stress on analysis and the neglect of synthesis. Everyone writes monographs, and cant about the "hack work" of textbook writers is the life of "pedagese" rhetoric. An authoritative textbook in some significant field of learning can, of course, be as valuable a contribution to knowledge and to teaching as any that can be made in some other field. One reason why hack writing predominates in the text field is the manner in which professional motivation is set against the participation of our ablest talent along these lines, although it could certainly be argued: (1) that the best method of correcting present standards would be the encouragement of such work by really first-rate talent, and (2) that the best method of improving current specialized effort—and of evaluating its relative importance—would be a broad effort to integrate the mass of monographic "knowledge" in a more comprehensive synthetic statement. But the sad truth is that most of our specialists could not write a comprehensive textbook, if they wanted to do so, and—it is to be suspected—that if they tried to do so, much of their expert learning would "come out in the wash."

is obvious to any observer.[9] Sociologists have coined the term "*anomie*" to describe this condition—a community in which the old code has lost its grip on individuals and in which a new code has not yet emerged.

In such a community "specialists" will arise to cater to the new "wants" of a psychological and emotional sort. Commercialized recreation like the movies and dance halls and pathic politics of the totalitarian type illustrate the thesis. Life has to increasing multitudes a quality that might be called "absence of wholeness" or perhaps emotional starvation. Segmental thought and organization becomes characteristic in economic and political life as another typical expression of specialized endeavor. A community in which such traits develop in wide areas becomes a menace to all the values of a free and democratic society. *Chassez le naturel, il revient au galop.* Soon the man on horseback or a civilian and pedestrian expert in emotional discharge on a mass-production basis arises to cater to the "needs" of the multitude—and his remedies will usually be of the type that narrows the market, reduces productivity, and consequently encourages the formation of patterns of violent discharge of the tensions that accumulate. If the very real achievements of specialization are not to be more than offset by these "costs" of the impersonal and abstract—desocializing—aspects of the process, a social program will have to be devised to make specialization "safe for society"—meaning safe for that which makes for social cohesion. Education in the broadest possible sense of the term—from the nursery through the adult stages—may well play a significant part in such a program.

Clearly tendencies of this type cannot be deflected by imposing a superficial change in the pattern of control while we maintain the essential character of the productive process. Industrial development in the U.S.S.R. produces exactly the same social consequences in this respect. Part of the explanation for the lack of understanding among radical critics of "capitalism" of the emotional and psychological factors that help to explain their own "radicalism" probably lies in the esthetic and spiritual poverty of Marxism which professes to see all these factors as dependent upon the mode of production in its *ownership* aspect. The legal technicalities of ownership, however, have little to do with the psychological impact of a given technique of production. "Ownership" by a coöperative, a capitalist corporation, or the federal government is likely to make little difference in the effect upon the impact of a conveyor-belt factory upon the workers involved in such production, unless suitable supplementary organization is provided, and the latter is as likely to occur under one form of "ownership" as under another.

[9] *Cf.* The useful community youth surveys of the American Youth Commission, *i.e.*, Howard M. Bell, *Youth Tell Their Story* (Washington, D.C., Am. Council on Educ.) 1938, pp. 274.

It is suggestive to examine briefly two examples of a social pattern that avoided some of these modern tendencies. The first is historical, the second contemporary.

Medieval education could with impunity stress the purely intellectual or strictly vocational—and these two often meant the *same* thing, as they frequently do today. It operated in a society of which every member belonged to a single strongly entrenched church and in which that church maintained a strong family system that was sacred in every sense of the term. Art in general, group expression in religious ritual and procession, production and consumption, and government itself—all derived their meaning from the same religion. In such a society—unified by a common faith—the problem of other-than-formal education could not even arise. All specialized activity derived its meaning from the common religious core of civilized life.

The Scandinavian countries supply us with a good contemporary example. Too frequently the relatively stable conditions in these countries are discussed in terms of social and economic policy and accompanying organization. The factor of cultural homogeneity is frequently overlooked and the deliberately *created*—as contrasted with historically grown—aspects of this homogeneity are very seldom observed. The striking results of the movement for supplementary adult education in Denmark and Sweden are first of all attached to an other-than-intellectual emphasis in the program. In its origin the movement might even be described as anti-intellectualist in the strict sense of the term. Heavy stress was placed by Grundtvig as early as 1844 on the social and coöperative aspects of education, on folk song and folk dance, on the rôle of tradition, myth, and religious observance, and on the peculiar educational fruits of working and living together. To stress the significance of the contribution this movement has made is not necessarily to demand exact duplication of its program or procedures. Obviously in a different social and historical setting another adjustment of content and techniques would be demanded, and this would be in strict accordance with the essential ideas involved in the movement.

The lessons of the historical and the contemporary example are therefore identical. To maintain social cohesion something beyond the usual secular program is required. In the normal course of events this will be supplied by institutions like the family and the church. With rapid social change involving the position of these fundamental educational influences, the content of formal education should be reëxamined and evaluated in terms of the social setting in which the institutions that supply formal education operate. When the institutions that are supposed to cater to other-than-intellectual needs of the human personality rapidly shift in their range of influence, basic questions are in order as to a corresponding shift in the direction and content of formal education with an eye

to making up the deficiencies now revealed in the activity of the other institutions that played so important a part in the social—*i.e.,* total— education of the young. The deepest challenge to formal education in a democratic society is to find emotional equivalents in its program for the type of thing that is likely to make the totalitarian appeal irresistible if it is not recognized at a sufficiently early date in the process. At bottom, this is the meaning of the appeal of the slogans of "security" and "national self-sufficiency" in political life as well as of the ideas of integration or meaningfulness that now play such a prominent part in American education. The solution, however, does not primarily lie in economic legislation or in improved methods of organizing educational subject matter or in better teaching, but in a radical reorientation in our thought about the content of formal education which will once again restore values to a central place in our program.

The foreign-trade policy and the domestic economic policies of our federal government are all defended in the name of the larger end of the preservation of democratic institutions. Democratic institutions fundamentally rest on the moral foundation of shared values, that is to say, they rest on moral like-mindedness. When the common ethical foundation is undermined—as it is by the drives that spring from division of labor and the impersonal exchange of specialization—dictatorship looms as the only effective way to prevent chaos. In his recent *Freedom and Culture* John Dewey says that a culture which "permits science to destroy traditional values but which distrusts its power to create new ones is a culture which is destroying itself" (p. 154), and it is clear from the context that the term "science" is intended to include all the impersonal technological implications of science as applied to economic activity.

This disintegration of world economy is an obvious fact, only partly obscured by some of the immediate military necessities of countries striving for autarchy. The splintering of domestic markets into monopolistic segments is equally obvious, and the threatening political implications of the destruction of both world and domestic markets are already head-line material in the daily press.[10] Economists who work in a scientific tradition that assumes the social framework of the economic process to be a constant, habitually tackle these problems as if they were questions of tariffs and trade barriers in the international field, and problems of price rigidity and monopolistic tendencies in the domestic market. In fact, the splintering of markets—international as well as domestic—cannot fruitfully be discussed upon the assumption of a constant social framework because the crisis with which we are dealing is itself caused by the breakdown and fluidity of the social framework. Totalitarianism is simply a political response to *anomie,* a final culmination of impersonal and secular tech-

[10] Harry D. Gideonse, *Organized Scarcity and Public Policy,* Public Policy Pamphlet no. 30 (University of Chicago Press), 1939.

niques that destroy all traditional checks and restraints. Restrictionism of the New Deal variety is a stop-gap, unable to deal with basic causes and itself a cause of further maladjustments. To restore free markets will reduce immediate economic pressures—and it is therefore desirable because it will give us a new breathing spell—but it will strengthen the very forces that have been traced in this paper, because they arise in an economy of increasing specialization and impersonality with its accompanying secularization and *anomie.*

The larger issue is one of social cohesion. In old-fashioned static language it is an issue of a moral or religious character. The term "static" is used because our modern problem calls for a dynamic process of moral regeneration, an effort to restore social cohesion by deliberate and intelligent endeavor. The social cohesion that made our free political and economic institutions possible in recent centuries was "inherited" (unplanned)—it was in John Dewey's words "a gift of grace." If the free institutions are to endure, the new cohesion will have to be *created* by conscious and rationally directed effort in a planned and purposeful manner. These issues—because they are issues of the social framework of the market—call for a return to the old art of *political economy* rather than a continued pursuit of the illusion of a scientific *economics.* Assumptions about the constancy of the social framework have tempted a generation of esoteric parlor economists into an orgy of mathematical precision, elegant equations—and historic irrelevance. Some of our best minds are splitting fine hairs when they might more fruitfully be splitting some of the dangerous logs that are clogging the flow of intelligence in its effort to grasp the significance of the current scene.

We have gone a long way from the time in which the leading economic thinkers were also the leading moral philosophers. Hume, Smith and Mill were the outstanding authors for their time in both fields. Under such circumstances it was safe to assume constancy in the social framework. Today we live in a climate of opinion in which the problems of values are regarded as beyond the realm of scientific discussion, unless we belong to the arid Marxist tradition in which values themselves are seen as derived from the mode of production. It is not surprising that "economics" has become increasingly exact in its logical and statistical formulations, and at the same time increasingly irrelevant to the social process it claims to study. Meanwhile the lawyers, political scientists, sociologists and even philosophers barge into the discussion of economic problems with admittedly amateurish standards while the economist withdraws in puristic horror to the refuge of the mathematical pages of the scholarly journals where even his own colleagues are not likely to read him for the simple reason that they prefer to spend their time with the lusty challenge to real thought about economic problems as it has sprung up with Adam Smith's earthiness in a business-man's magazine like *Fortune.*

We have gone the whole way from relevance to irrelevance, from a concern with the wealth of nations to a concern with a splinter in the economy. We leave political economy as a social science to journalists while we busy ourselves with the "economics" of money, or agriculture, or labor, or monopoly. It is distinctly bad manners in the profession to draw attention to the fact that the assumptions upon which the analysis of the splinters is based, are increasingly irrelevant to the *altogetherness* of things and that there is no peculiar social merit in the analysis of non-existent problems.

The issue is not one of design *or* drift, or of expanding markets *versus* governmental controls. This paper should not be interpreted as an argument for laissez-faire or as an argument against "planning" in the broad sense of applying intelligence to social problems. There is acute need for planning—for systematic and purposeful activity. The real questions should be directed at the nature of present planning. The present drift of planning—private and public—is concerned with surface symptoms. This is true of the planning which is involved in our foreign-trade and anti-monopolistic policies—planning to restore competitive controls—and it is also true of the planning that is involved in the domestic policies designed to create contrived scarcities. We should keep our eye on the ball: the framework of the market itself is shifting.

The splintering of international and national markets is only superficially a question for economic analysis under the traditional asumptions of constancy of the social framework. For several generations such an assumption has been a defensible working hypothesis. The current crisis has arisen because the assumption of its constancy is no longer valid. It is a crisis of scholarly method as well as of society itself.

Policies designed to broaden markets by the restoration of competitive controls—the open market at home or abroad—are usually argued on the implicit assumption of a *constant* social framework for the market. The argument usually seems unconvincing or even irrelevant to those who argue for restrictionist devices such as many of our domestic economic policies. These restrictive domestic policies—as well as their autarchic parallels in foreign trade—are usually based on assumptions that involve a shifting social framework as a primary source of motivation. Until the issue is joined in this basic area of disagreement—that is to say, until the question is asked: is the social framework (still) a constant? and if not, what difference does it make in the discussion of relevant policy?—the divergent policies in international and domestic markets will be argued with heat but without light because the arguments are not made within the same universe of discourse.

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SOME EFFECTS OF A MINIMUM WAGE UPON THE ECONOMY AS A WHOLE

This paper is concerned with the economic effects, upon the economy as a whole, of establishing a uniform minimum wage. The system under consideration is a closed economy operating at less than full employment and with imperfections both in the factor markets and in the commodity markets. Under these conditions, a minimum wage is likely to increase the economy's propensity to consume. Whether the total volume of employment will, on balance, be maintained, diminished, or increased depends upon whether the increase in effective demand flowing from the heightened propensity to consume equals the decrease in effective demand caused by factors whose influence is adverse. It seems probable that the establishment of a moderate minimum wage would create more consequences favorable to the maintenance of the level of employment than unfavorable. Though price advances may result, the real income of the persons covered by the legislation will be raised. Whether the real incomes of other members of society will be altered is difficult to foretell, the result depending upon the extent of the price changes and upon whether or not the level of employment is maintained.

Most books and articles dealing with the subject of minimum wages are descriptive or argumentative works concerned chiefly with some specific legislative act.[1] In addition to works of these types there are several in which some attempt is made to give a theoretical explanation, of more or less general applicability, of the economic effects of minimum wages.[2] There is neither space nor necessity for detailed criticism of this literature, and it will suffice to indicate the reasons for believing that further study of the subject is necessary:

(1) Until very recent years, almost all theoretical discussions of wages and employment have been founded, consciously or otherwise, upon assumed conditions of perfect competition and full employment. The use of this hypothesis is entirely valid, provided its implications are thoroughly understood and the limitations they impose squarely faced. But failure to distinguish clearly between this analytical model and the real world has too often led writers to content themselves with making casual statements about the effect of minimum wages upon "cost" and equally uncomprehensive declarations about the consequences of changes in cost.[3] It seems

[1] The following are illustrative of these types: Rudolf Broda, "Minimum Wage Legislation in Various Countries," Bulletin 467, U.S. Bureau of Labor Statistics; Dorothy W. Douglas, "American Minimum Wage Laws at Work," *Am. Econ. Rev.*, Dec., 1919; Frankfurter-Dewson-Commons, "State Minimum Wage Laws in Practice" (National Consumers League pamphlet); Helen Fisher Hohman, *Development of Social Insurance and Minimum Wage Legislation in Great Britain* (New York, Houghton, 1933); Victor P. Morris, *Oregon's Experience with Minimum Wage Legislation* (New York, Columbia Univ. Press, 1930).

[2] See, *e.g.*, A. C. Pigou, *Economics of Welfare*, part iii, chapters 15-20; Sidney Webb, "The Economic Theory of a Legal Minimum Wage," *Jour. Pol. Econ.*, Dec., 1912; H. R. Seager, "The Theory of the Minimum Wage," *Am. Labor Legislation Rev.*, Feb., 1913; J. B. Clark, "The Minimum Wage," *Atlantic Mo.*, Sept., 1913; Pigou, "The Trade Boards and the Cave Committee," *Econ. Jour.*, Sept., 1922; Pigou, "A Minimum Wage for Agriculture," in his *Essays in Applied Economics*.

[3] These faults have characterized both advocates and opponents of minimum wage regulation. *Cf.* H. R. Seager, *op. cit.*, and J. B. Clark; *op. cit.*

desirable, therefore, to discover what results can be accomplished by utilizing a different model.

Furthermore, earlier analyses frequently neglected to differentiate between the effects of a wage change upon one firm and its effects upon the whole system, an error which usually resulted in their overlooking the relationship between wages and effective demand.

(2) Recent writings on employment, by correcting these particular faults, have given new and better direction to employment theory and to the theory of wages.[4] Like some of the publications of earlier writers, however, they are usually restricted in scope: (a) they analyze only generalized changes in wages, *i.e.*, changes in all wage rates; (b) they consider mainly the effects of such changes upon the economy as a whole; (c) in general, they do not deal with long-run[5] results.

The time seems propitious, therefore, for a reëxamination of the economic effects of a legal minimum wage.[6] Such a study logically divides itself into three sections, dealing, respectively, with the repercussions of various forms of minimum wages upon individual firms, upon single industries, and upon an entire system. Each of these sets of repercussions calls for and amply repays careful study, and one of them cannot be dissociated completely from the others. Yet it is manifestly impossible to undertake more than one of these lines of inquiry within the short space of one article. In consequence, the present paper will be confined to the examination of that aspect of minimum-wage regulation in which most interest and controversy lie: the effects of a general minimum wage upon the economy as a whole.

I

Before elaborating our own analysis of the effects of a legal uniform wage minimum, it will be well to give a brief résumé of another and quite different explanation of the consequences of this type of regulation. The argument runs as follows: The imposition of a minimum rate of pay will raise the expenses of production. Since entrepreneurs are obliged to equate marginal cost and price, they are faced with the alternatives of reducing out-

[4] See, for example, R. F. Harrod, "Professor Pigou's Theory of Unemployment," *Econ. Jour.*, March, 1934; J. M. Keynes, *The General Theory of Employment, Interest, and Money*, esp. chapters 3 and 19; Joan Robinson, "The Long-Period Theory of Employment," *Essays in the Theory of Employment;* P. M. Sweezy, A. P. Lerner, and others (round-table on "Wage Policies" at Fiftieth Annual Meeting of Am. Econ. Assoc.), *Am. Econ. Rev. Suppl.*, March, 1938; etc.

[5] But a beginning in this direction has been made by Mrs. Robinson in "The Long-Period Theory of Employment," published in her *Essays in the Theory of Employment.*

[6] The following paper, being an abstract, generalized study, unrelated to any actual law or administrative system, makes no pretense of providing a ready answer to the current question. However, the methods employed and problems raised may possibly suggest the points toward which further research might profitably be directed.

It will be noted that the discussion is limited to minimum-wage regulation and that control of hours of work is not considered.

put to the point at which the new cost curve crosses the price line or of raising price. Which of the two courses will be chosen will depend upon the elasticity of the demand.[7] But the results of either course will be deleterious, for in one case unemployment will be created, and in the other case prices will rise. Legal minimum wages, except in rare cases of extreme exploitation, are therefore inimical to the interests of workers and of society at large.[8]

If a price rise were the only possible result of increasing the costs of some producers; and if the price rise were the only significant economic change related to the imposition of the minimum wage, there could be little doubt that employment would be reduced. The fact that recent writings on employment have given prominence to certain factors which do not enter into the Mill-Clark treatment may indicate, however, that the earlier expositors had overlooked several complexities.

II

Wage legislation which contemplates the establishment, by public authority, of a minimum rate of pay for the entire economic system will have many and various repercussions, and it is necessary to select for analysis here only those of primary importance. Consequently, attention will be confined to the effects of a minimum wage upon employment, output, and prices. The basic assumptions hypothesized throughout the discussion must be made clear. The system under consideration will be a non-collectivist exchange economy which is either entirely "closed" or is virtually free from international influences. Existence of imperfections in the markets for commodities and for agents of production will be recognized, and the system will be assumed to be operating at less than full employment.[9] The question

[7] The elasticity of the demand curve of the *industry*, presumably, since under the conditions necessarily (though tacitly) assumed by this explanation the firm's demand curve must be perfectly elastic.

[8] A concise statement of this point of view, which is still widely held, was formulated some years ago by J. B. Clark: "Practical tests of the proposed policy are now in progress . . . and the results of these trials will be carefully watched; but a few things can be asserted in advance as necessarily true. We can be sure, without further testing, that raising the prices of goods will in the absence of counteracting influences, reduce sales; and that raising the rate of wages will, of itself and in the absence of any new demand for labor, lessen the number of workers employed." ("The Minimum Wage," *Atlantic Mo.*, Sept., 1913, pp. 289-90.) *Cf.* J. S. Mill, *Principles of Political Economy*, Ashley ed., p. 362.

[9] The assumptions above enumerated have many significant implications with regard to the individual firm and individual industry, and it is necessary to bear them in mind in studying the effects of a minimum wage upon the whole economy. The more important of these implications are indicated briefly:

(1) When the markets for the agents of production are imperfect, the several firms are likely—even within one industry—to vary not only in their technical coefficients but also in the prices they pay for each of the agents. A given minimum wage will thus affect some producers' costs and leave others' untouched; and, of the former number, there may be wide variation in the manner in which their marginal cost curves shift. (2) When the markets for commodities are imperfect, an individual firm has discretion as to how to meet

to be answered, then, is what are the principal consequences of setting a blanket, uniform minimum wage in all industries?

1. Effects upon employment. Adoption of a general minimum wage will increase the money incomes[10] of a number of employed wage-earners, the amount of the increase and the number of workmen affected depending at the outset upon the level at which the minimum is fixed and upon entrepreneurial responses to the regulation. Additions to the incomes of those who formerly stood at the bottom of the income structure might conceivably be used by them to increase consumption, increase saving, or both. But it is most reasonable to believe that virtually the whole of the increment will be spent. Whatever the ultimate result, the *initial* increase in the incomes received by workers covered by the wage order represents a transfer from other income receivers in the system, possibly from entrepreneurs. Since the latter are customarily persons of higher-than-average incomes, it is probable that their former incomes were more than sufficient to satisfy their desires for consumable goods and services and that the excess was saved. If this be true, the most plausible supposition is that any reduction in entrepreneurs' incomes will be met chiefly by reductions in their savings.[11] It is clear, then, that one initial result of the application of the minimum-wage order may be an alteration in the division of a given money income; and that this altered distribution is likely to be accompanied by an increase in the proportion of the total money income which is devoted to consumption.

An increase in the economy's propensity to consume, *ceteris paribus*, would of necessity raise the level of employment, since it is only in this way that the new demand for consumption goods could be satisfied. A wage increase might thus not only alter proportionate shares in the money income but bring about an increase in the real income of the economy. Such an eventuality might benefit not only the recipients of the minimum wage but

such a change in cost. Instead of the familiar price-output adjustment of perfect competition, the producer may accept a lower return, cut some other cost, "differentiate" his product, etc. (3) The adjustment of the "industry" to a given minimum wage depends upon how the cost structures of the component firms are affected and upon the courses adopted in response to these changes in cost. Thus there is no single pattern of adjustment which will be followed in every industry; and there is no simple explanation of the adjustment in any industry.

[10] The implications of this fact can be ignored in studying the individual firm or industry, but they are fundamental to the treatment of the effects on the economy.

[11] The reader will recognize, of course, that the persons whose relative savings are reduced are not necessarily the employers in the firms affected by the minimum wage, even in the short period. For example, many "sweated" trades are characterized by circumstances which result in exceptionally low prices for consumers but only meager returns for many employers and employees alike. But in these cases the principle is not altered: the essence of this initial phenomenon is a transfer to the persons at the bottom of the income scale from persons and groups of persons higher up in the scale; *i.e.,* from persons with higher average saving/consumption ratios. It may come wholly from a few entrepreneurs or be spread in very small amounts over a large number of consumers.

other wage-earners and even entrepreneurs as well. If an increase in the propensity to consume were the only consequence, the ultimate results of the minimum wage would therefore be to raise the level of employment, to augment the total real income of the economy, and to effect a redistribution in the relative shares with little or no decrease, in the long run, in the entrepreneurs' absolute share.

But "other things" are not likely to be equal, and the net influences of the minimum wage upon the marginal efficiency of capital and the rate of interest are not clear. At the outset, there may be some reluctance on the part of entrepreneurs to make investments out of reduced incomes. It must be remembered that the "marginal efficiency" of capital is the *anticipated* marginal productivity of capital, and if entrepreneurs' expectations are gloomy they will have a temporarily depressing influence on investment. It is also true that because of the alteration in the relative shares described above, the consumers' goods industries will benefit more, initially, than will the investment goods industries. On the other hand, there are also several features of the new situation which act favorably upon investment. First, the stimulation received by the consumers' goods industries from the heightened propensity to consume will itself increase, in all probability, the amount of capital required by the consumption goods industries.[12] Second, in so far as the investment goods industries are trades in which the ratio of capital to labor is high, the wage rise is likely to increase the investment attractiveness of these "more capitalistic" industries. Third, promulgation of a minimum wage may promote the desire to replace men by machines, and, where this substitution is possible, the increased use of machines will benefit the capital goods industries.[13]

The reduction in the proportion of the total income which is saved was noted above, but whether there would, in the long period, be a reduction in the absolute amount of money saving is uncertain. If the quantum of saving were diminished and the marginal efficiency of capital increased, on balance, by the establishment of the minimum wage, the rate of interest

[12] A great part of the demand for capital goods is derived from the demand for consumption goods, and a rise in the latter must therefore be beneficial to the former. Mr. Hicks overlooks this fact when he says that, although a wage increase will reduce unemployment in the consumption goods trades, this favorable result "will be directly set off by more unemployment in the heavy industries" (*The Theory of Wages*, p. 194).

[13] It is interesting to observe that, historically, the industries to which minimum wages have directly applied have been consumers' goods industries. This is probably attributable to the fact that the chief motivation of most minimum-wage laws has been the "living-wage" principle, and capital goods industries have generally not been major offenders against this standard. But, upon different bases, almost any industry might conceivably be regulated. It is therefore theoretically possible, though practically improbable, that a minimum wage might be applied to an investment goods industry. If so, and if the result were to raise the price of capital goods to any considerable extent, the adverse effect on investment might, in this special case, outweigh the favorable influence.

would tend to rise, and *vice versa*.[14] The importance of the rate of interest in determining the level of employment, however, is open to question.[15] Certainly the other two factors are more significant.

If there is an increase in employment which is accompanied by a decline in the numbers of the unemployed, there will be a consequent reduction in the volume of expenditures from public funds for the support of the unemployed. What effect this change will have will depend upon what fiscal policy the government employs to meet it.[16] If income taxes are decreased or the sale of government bonds diminished, the volume of money saving will doubtless increase; and the increase in saving will be greater if bond sales are reduced than if taxes are lowered. But a reduced expenditure for public poor relief may not induce fiscal authorities to lower governmental receipts. If there is no appreciable change in the burden of public relief, the problem of fiscal policy does not arise, of course.

2. *Effects upon output.* In the preceding paragraphs our attention was confined to the influences exerted by a uniform minimum wage upon *total* employment in the system. If the wage regulation should raise the level of employment, it follows that the total output would be thereby increased, though in the short run the operation of diminishing returns might prevent an increase fully proportional to the rise in employment. Whether or not the total volume of employment and output is changed, it might be well to inquire what, if any, changes may be expected in the *composition* of total employment and total output.

A wage increase sometimes sets up a tendency, in the opinion of Mr. Hicks,[17] for capital funds to shift out of industries in which large amounts of labor are utilized and into those industries which employ a smaller ratio of labor to capital. There appear to be several factors whose operation will tend to minimize that movement, however: (a) Any shifts in demand for particular products occurring as a result of the wage change will probably benefit industries in which the labor-capital ratio is high as well as those in which it may be low. (b) The initial cost involved in entering a business using a large quantity of capital is greater than the average cost of entering industry in general. (c) The usual impediments to the rapid movement of capital—reluctance to sacrifice a sunk investment, etc.—will be present. It

[14] This is the result which traditional interest theories would predict. Since the volume of saving and the marginal efficiency of capital play only minor rôles in Keynes's theory of interest, the changes here described would probably be regarded by Keynesians as unlikely to have much effect upon the rate of interest.

[15] *Cf.* J. F. Ebersole, "The Influence of Interest Rates upon Entrepreneurial Decisions," *Am. Econ. Rev. Suppl.,* March, 1938, pp. 74-75.

[16] A similar problem of relief financing is treated by Mrs. Robinson in "Certain Proposed Remedies for Unemployment," *Essays in the Theory of Employment,* pp. 64-66.

[17] *The Theory of Wages,* pp. 187-189.

seems probable that any "shifting-out of capital" will be gradual and of small magnitude.

In its effects on the supply of labor in various industries, a uniform minimum-wage law will differ from a generalized wage advance. In the first place, an upward revision of all wage rates might not alter appreciably the relative attractiveness of various jobs. But a minimum wage of the type here considered would initially and directly change only the wages of the occupations formerly receiving the lowest remuneration. Although its ultimate effect on total employment might benefit other workers also, such a wage regulation might nevertheless attract some workers from other occupations. Second, the minimum wage would be less likely to draw *new* workers into the labor market than a rise in all wage rates. Third, it is probable that either type of wage change would be accompanied by the withdrawal of some workers[18] from the labor market (*e.g.*, some wives would no longer have to work if their husbands' incomes were raised), though this movement would be more marked in the event of a minimum-wage order. Any shift of laborers to the regulated industries would be of limited significance, since the usual effect of an over-supply would be precluded by the existence of the law. It is also improbable that the transfer would be large enough to change wages or employment in the industries from which workers shifted.

Another change in the composition and location of total employment and output may be introduced by a geographical movement of firms. Although important, this subject cannot be discussed in the present paper, for the questions involved are more properly classified and more easily handled in the study of the effects of wage regulation upon the industry.

3. *Effects upon prices.* It has been seen that a general minimum-wage order may result in small rises in the prices of some commodities, and it is important to give further examination here to the nature of the price changes and to their effects upon various portions of the economy. Restricting our attention for the moment to instances of price rises, we may say that firms which raise prices will simply lose business to firms (in the same or other industries) which do not raise prices—if we assume with Clark that total demand is unaltered. The results in the system as a whole would then resemble those which may be found—upon an analogous but in that case more appropriate assumption with respect to total demand—to be experienced by the industry. But if the imposition of the minimum wage should produce no diminution in total consumption and employment, the results are not so simple. It is impossible, of course, to predict *a priori* the exact disposition of the income in such a case, but two factors to which allusion has already been made may be significant. It has been observed that, historically, both specific and general minimum-wage laws have applied to con-

[18] This is a point which Professor Douglas greatly stresses. See *The Theory of Wages*, pp. 313-314.

sumption industries, and it is therefore in these industries that any price rises are likely to occur. But the increase in total effective demand, being caused by the elevation of the propensity to consume, is also concentrated on the consumers' goods industries. It is therefore not too much to say that some of the very industries in which demand curves are raised perceptibly may be ones in which some firms have advanced prices. To the extent that this is true, the disturbances of readjustment will be minimized.

It is a commonplace that rises in prices do not fall upon all members of economic society in the same fashion and with the same force. Furthermore, any changes in money prices attributable to a minimum wage are less significant than changes, if any, in real income. It is equally familiar that a rise in the level of employment, with given organization, equipment, and techniques, is accompanied by a reduction in the short period of the average real income per head. The long-run effect, however, is not easy to predict. Let us examine how the real incomes of particular groups would be affected:

a. Real wages of workers covered by the regulation. It seems highly probable, at first glance, that the wage increase of workers affected by the minimum would be real as well as monetary. The introduction of a highly formalized analysis may be unnecessary, but the examination of one hypothetical situation will prove useful at this point. Let it be assumed that a uniform minimum-wage law has been enacted. Let it be assumed also that all firms which feel the incidence of the regulation had previously been paying the same wage; that technical coefficients are the same for each of these firms; and that the curves of average and marginal costs, respectively, of each firm are identical with the average and marginal cost curves of each other firm so affected. Suppose, finally, that each firm makes its adjustment wholly through price and output.

If the expenditures of the workers in the firms under consideration were restricted to purchases of the product of their own firms (or of products whose prices were raised in precisely the same degree) the problem of measuring the change in their real wages would be easy:

$$\frac{\textit{old wage}}{\textit{old price}} = \textit{old real wage}, \qquad \frac{\textit{new wage}}{\textit{new price}} = \textit{new real wage},$$

and $$\frac{\textit{new real wage}}{\textit{old real wage}} = \textit{index of real wages on the old base.}$$

The above case, in which all of the workers' expenditures are on products whose prices are uniformly affected by the minimum, represents the smallest rise in real wages from a given change in money wages. The upper limit is the case in which workers spend *no* part of their incomes upon goods whose prices have advanced. In this event, the old price = new price (*ceteris paribus*), and the percentage rise in real wages is equal to the percentage

rise in money wages. The actual rise in the real wage of workers employed in the regulated industries, then, will lie somewhere between the limits here delineated.

b. Real wages of other wage earners. Workers whose wages are already equal to or higher than the minimum legally adopted are not directly benefited by the kind of legislation considered in this section. If it be assumed that a few prices are raised by any amount whatsoever, the real wages of such workers will be lowered by an amount measured by the change in a hypothetical index of the prices entering into their budgets. More accurately, this is the result indicated if only the price changes are considered. But there are several factors whose operations are likely to limit or even entirely offset this apparent reduction in real wages. The multitudinous wage rates existing throughout the economy are often thought of collectively and referred to as the wage "structure." The image suggested by such a metaphor is that of an edifice with internal stresses and with interdependent parts the position of which may be changed if the thrusts are altered. It is interesting to inquire what influences the establishment of a minimum rate of pay throughout the economy may exert upon other wage rates. First, any increase in total employment arising from the heightened propensity to consume means an increase in the number of employed "labor-units" (however defined), and for individual workmen this is likely to mean more regular employment. Second, the rise in the level of employment will strengthen the bargaining position of all laborers, and those not covered by the minimum law may be able to secure an upward revision in their own wages by usual trade-union methods. These features of the situation will counteract, to a greater or less degree, the effect of price rises; but their existence depends upon whether employment is raised. It should be observed, third, that it is possible that some prices will actually fall. Some of the industries which experience an increase in demand as consumption patterns shift may offer economies to a large-scale operation. Expansion of these industries may lower somewhat the prices of their products.

Real wages of workers other than those embraced in the minimum-wage legislation evidently will be somewhat lowered in the short run if prices rise. But it is possible that in the long run the influences of the enlarged effective demand upon the regularity of employment, the bargaining position of the trade unions, and the attainment of more economical scales of operation may reduce, if not entirely counterbalance, the effect of price changes upon real wages.

c. Real income of entrepreneurs and rentiers. It has been observed above that, so far as its effect upon saving and consumption is concerned, a minimum-wage law would certainly lower the relative share of the social income going to the entrepreneurial class but might not lower, in the long period, its absolute share. Any price advances which may occur will affect rentiers adversely, of course.

In summary of the price discussion, though price advances may follow the establishment of a minimum wage, the real income of the class covered by the legislation will be increased. Whether the real income of other members of society will be altered is difficult to foretell, the result depending upon the extent of the price changes and upon whether or not the level of employment is maintained.[19]

Summary

Generalized, catholic conclusions as to the effects of a blanket minimum wage upon the whole economy are extremely difficult to formulate. As we have seen, there are many points at which the economy might feel the influence of the regulation, and unfortunately the manner in which one sector may be affected usually depends in large measure upon how others are affected. Obviously, the most important single (economic) question is whether the total volume of employment will, on balance, be maintained, diminished, or increased. This outcome depends, in turn, upon whether the increase in effective demand flowing from the heightened propensity to consume is equal to, less than, or greater than the decrease in demand caused by price rises or a flagging of investment. In any actual situation, a number of factors should be considered, such as the amount selected as the minimum rate, the phase of the trade cycle, the kind and number of businesses likely to be affected, etc.

It seems probable that adoption of a wage which would raise considerably the incomes of those who formerly had been receiving the very lowest incomes and which would bring the wage scales of all firms into some rough conformity with the marginal productivity of the system would be likely to be followed by more consequences favorable to the maintenance of the level of employment than unfavorable. And it is possible that in some circumstances there might even be some increase in employment.[20]

On the other hand, however, there undoubtedly exists at a given time a zone beyond which the wage could not be set without producing more adverse effects on employment than beneficial ones. The various unfavorable reactions on entrepreneurial expectations which might be produced by a large increase in wages serve to limit the heights at which the minimum wage might be set in a non-collectivist economy.

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[19] It is well to remember that the conclusions here and at certain other points in this section would have to be modified if the assumption of a closed system were relaxed. If there should be large changes in prices, for example, some adverse effects might be felt in an open system which do not arise here.

[20] See the remarks by A. P. Lerner at the round-table on "Wage Policies," *Am. Econ. Rev. Suppl.*, March, 1938, pp. 157-158.

WAGES-FUND THEORY AND THE POPULAR INFLUENCE OF ECONOMISTS

Aside from discussions over technical aspects of theory, economists as social scientists have always been concerned with public questions of their day. Although the wages fund is mainly of historical interest in economic theory, it has generally been supposed that it represented a subject on which professional economists made a contribution to public opinion of mid-nineteenth century England. Study of the views of a great variety of individuals as presented in reports of a British Royal Commission in 1867-68 indicates that the discouraging conclusions of economists on the success or justice of trade-union action to raise wages were not widely known. Individuals and groups to whose interest such professional opinion would have been favorable were not familiar with it. John Stuart Mill, a prominent public figure at the time and a wages-fund theorist, has been thought to have relaxed the severity of his conclusions in later years, but examination shows that he did not give up the basic concept of the theory.

It is tradition that during the middle years of the nineteenth century the theoretical views of economists were popularly applied by the British public to the efforts of trade unions to raise wages. The generally accepted wage theory at the time was that known today as the "wages fund." Wages were supposed to have been paid from a fund of capital in the hands of the capitalist-employer. For a given period of time, a year for example, the size of this fund was fixed. It was a corollary of this proposition which was applied to oppose trade-union action dealing with wages. If one group of workers increased its share by pressure of a strike, some other group of workers somewhere would have to take less; only a certain total amount was available for wage-earners. In the history of the development of economic theory it has been represented that this theoretical argument of the ranking economists was used by the general public or "informed middle-class opinion"[1] to demonstrate the futility or inequity of strike action over wages. The theoretical views of economists were supposed to have given this lead to popular thought. Examination of evidence available shows that these theoretical arguments of economists were not widely known to the general public, and were practically unknown to groups with an immediate interest in a wages economy.

Ricardian economics is the basis for the wages-fund theory, but John Stuart Mill is considered to have given it the most concise and generally accepted expression in his *Principles of Political Economy,* first published in 1848. His much-heralded "recantation" of the theory in 1869 is considered to mark its dénouement. Cairnes's reassertion of the doctrine and its implications for trade-union activities in 1874 is looked upon as a dying gasp. It was during the middle years of the century, corresponding to the period of Mill's preëminence as an economist, that the general public is supposed to have been most interested in the economists' theoretical views on wages. By a study of the writings of economic theorists of the period

[1] Sidney and Beatrice Webb, *Industrial Democracy,* London, 1897, pp. 615 *ff.*

Taussig has shown that their chief interest was in the implications of the wages-fund theory for the problem of population control rather than for that of the combination of workers.[2] More precise evidence is available to show that the public was generally unaware of the implications or conclusions of the wages-fund theorists as to trade-union activity.

Strikes in the London building trades in 1861-62 and continued labor disturbances culminating in considerable violence in Sheffield in 1867, led to the selection in that year of "Royal Commissioners Appointed to Inquire into the Organisation and Rules of Trades Unions and Other Associations," as they were designated by the Queen's warrant. This Commission sat for evidence in 1867-68, hearing the testimony from people of all shades of opinion. The reports of the Commission are a fine cross-section of the diverse views on these matters as expressed by representatives of the British public at that time.[3] From the views revealed in these reports, popular opinion on trade unions and the extent to which the public was cognizant of the wages-fund doctrine, and was influenced by it in its thinking on trade unions, can be ascertained. This was just at the time when the theory is supposed to have had its greatest currency in popular thought. The hearings before the Commission, however, indicate to the contrary. The British public in 1867 was unfamiliar with the theoretical views of economists on wage theory. The wages-fund doctrine and its implications as to union activities were unknown to people who were closely concerned with these matters.

For a period of more than a year a Royal Commission heard testimony from all types of employers, from public officials, and from union members and leaders. It was the ideal opportunity for employers to expound the

[2] F. W. Taussig, *Wages and Capital*, New York, 1897, pp. 236-240.

[3] *Reports of the Royal Commissioners Appointed to Inquire into the Organisation and Rules of Trades Unions and Other Associations; together with Minutes of Evidence and an Appendix Containing a Digest of the Evidence, Correspondence with Her Majesty's Missions Abroad regarding Industrial Questions and Trades Unions, and Other Papers. Presented to Both Houses of Parliament by Command of Her Majesty,* London, 1867-69, xii vols.

These are the official parliamentary documents as published by Her Majesty's Stationery Office. The first ten reports contain a verbatim account of the testimony before the Commission in court record style. The last report is divided into two "volumes," the former containing the final majority and minority reports of the Commission plus dissents and "observations" of several individual Commissioners; the latter volume, an "appendix," includes a digest of the entire evidence from the first ten reports, tabulated replies from questionnaires submitted by the Commission to trade unions, letters from members of the British diplomatic service relative to labor conditions in the foreign countries to which they were representative, and miscellaneous correspondence from employers, trade associations, and chambers of commerce. These reports were published intermittently from 1867 to 1869 and vary in size from about 30 to 200 pages each. Professor Richard T. Ely personally collected these reports and presented them to the Library of the University of Wisconsin. They have been bound into two large volumes, and are now in that library. The author is unable to determine whether a full collection of these official reports is available in any other library in the United States.

wages-fund theory and its conclusions as to efforts to raise wages by combination. It would have been a very convincing argument for public consumption, and above all could have been clinched by the prestige and authority of Mill. But the theory was neither mentioned nor discussed by anyone—commissioners, employers, or workers. Only once in the testimony was the theory suggested. On the first day of public hearings, Sir Edmund Walker Head, a member of the Commission and former governor-general of Canada, was questioning the first witness, Robert Applegarth, leader of the London carpenters. The following testimony is recorded:

> Q. Do your interests depend somewhat on the amount of capital employed in the trade? Yes.
>
> Q. And does not the amount of capital employed in the trade depend upon the employer and what profit he makes by it? Yes.
>
> Q. Therefore your interests may be affected indirectly through the employer, although the direct benefit apparently is gained by the workmen? Yes; but I would ask what we should do in the event of all the rest of the trades getting an advance of wages, and the price of things going up, if we were to stand still.[4]

Further discussion along this line was not pressed, and never again during the entire testimony was this approach made. Even here with the first witness there was only a hint, it will be noted, and the theory was not directly expressed. It is questionable that either of the men knew the orthodox conclusion of the line of economic theory along which they started. In an addendum to the final reports of the Commission the wages-fund theory was presented and applied to the problem of the trade unions. Mr. Herman Merivale wrote some personal observations, including an exposition of the wages-fund doctrine, which he submitted to his fellow members for inclusion in the official report. Merivale had been a barrister, under-secretary for India, and from 1837 to 1842 he held the professorship of political economy at Oxford. He was the only professional economist connected with the investigation. In his memorandum he said:

> That wages depend in reality on the demand and supply of labour; that they cannot rise, except either by an increase of the aggregate funds employed in hiring labour, or a diminution in the number of competitors for hire; and that these truths, applicable as they are to the entire amount of wages earned in a country, are as substantially, though not as directly, applicable to the amount of wages earned in each separate employment—are propositions which . . . are as thoroughly understood and admitted by the intelligent class among the workmen themselves as they are by impartial inquirers.[5]

This is a succinct statement of the wages-fund theory by an economist. It is supposed to have been the popularly accepted explanation of wages. Yet the final majority and minority reports of the Commission did not include any reference to these observations of Merivale. The chairman of the Com-

[4] *First Report,* 1867, p. 10.

[5] *Eleventh and Final Report,* 1869, vol. 1, p. cxxi.

mission, Sir William Erle, wrote that they were of a speculative nature and not "appropriate to the substance of the *Report*."[6] It would appear that these propositions did not receive the popular acceptance which Merivale claimed for them among the "intelligent class" of workmen or even the "impartial inquirers" as represented by the members of the Commission. It is also curious that during the investigation Merivale did not direct the testimony of any witness toward the wages-fund theory.

The only conclusion which can be drawn from this evidence of testimony and official reports is that the principles of the wages fund were not known to any sections of the general public which were dealing with trade unions. Neither employers, representatives of trade associations or chambers of commerce, nor public officials appearing before the Commission had any familiarity with the theoretical views of economists on wages and trade-union combinations to raise them. It was a very limited number of people who could apply advanced economic theory to this problem at issue. These theoretical discussions of wages by professional economists did not filtrate through to the thinking of the middle class to any extent. The views of the employers and other interests opposed to the demands of trade unions were that wages were determined by "supply and demand," but this formula was never presented in the theoretical development of the wages-fund doctrine. The chief concern over demands for wage increases was that Britain's comparative advantage in foreign trade would be threatened. Interests opposed to the trade unions may have missed a trick in not applying the theoretical conclusions of professional economists on wages. Historians of economic thought have been wrong in ascribing to economists a leading influence on the popular opinion of mid-nineteenth century Britain in regard to trade unions and their efforts to raise wages.

Mill's much-discussed recantation of the wages-fund theory appeared in the *Fortnightly Review,* May, 1869. Mr. W. T. Thornton had written a book dealing with the labor problem in the course of which he denied that there was such a fund as a wages fund in the hands of individual capitalists or the capitalist class as a whole.[7] He believed that wages were paid from the proceeds of current sales. In his review of the book Mill acknowledged the validity of Thornton's criticism. This is supposed to have been his recantation. Taussig says that it was actuated by friendship for Thornton and the shift in Mill's interest from technical economic theory to the ethical and social considerations of trade-union activtiy.[8] If one looks to what Mill believed about wages, as expressed in this review, it will be seen that he still clings to the fundamental proposition of the theory, *i.e.,*

[6] *Ibid.*

[7] W. T. Thornton, *On Labour: Its Wrongful Claims & Rightful Dues,* London, 1869. Thornton drew much factual data for this book from the reports of the commission of 1867.

[8] F. W. Taussig, *Wages and Capital,* New York, 1897, p. 248.

that labor is paid from a fund in the hands of the capitalist; only now, wages are not rigidly pre-determined, they are a residuum along with profits for each individual entrepreneur; wages can be raised at the expense of profits. This is a reversal to the strict Ricardian position of the relation between wages and profits. Mill's repudiation of the wages-fund doctrine is overrated; in fact, he never gave up the fundamental proposition of the theory. In the seventh edition of the *Principles*, published in 1871 two years after his review of Thornton's book, he did not alter his previous observations on wages. In a footnote he referred to the review but remarked that these new principles were "not yet ripe for incorporation in a general treatise on Political Economy."[9]

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[9] J. S. Mill, *Principles of Political Economy*, Ashley ed., p. xxxi.

COMMUNICATIONS

A Reply to Mr. Villard

In a recent article the writers have argued that checks which are cleared within bank accounts at the times of bank postings represent a distinct, but negelected, form of money.[1] Mr. Villard takes issue with this view on the ground that it assumes an unrealistic definition of a deposit balance,[2] which we defined as the net credit balance existing within a bank account at any given time. The writers feel that this definition is the one generally accepted by bankers, economists and the public at large. Even Mr. Villard, himself, unwittingly slips into the use of it in his concept of exchange velocity.[3] Since the disagreement between Mr. Villard and us hinges on a definition, however, the issue at stake is whether his definition or ours is the more suitable for monetary analysis.

Mr. Villard's definitions of a deposit balance are: (1) "the amount of checks which will be honored when drawn by an individual;"[4] (2) "the right to draw a check."[5] How is a deposit balance in either of these senses to be measured? Mr. Villard gives no answer. If the net credit balance within a bank account is used as a measure, his definition of a deposit balance agrees with our own. On the other hand, if the amount of the net credit balance within a bank account *plus* the amount of checks accumulating for credit to the account during the interval between bank postings is used as a measure, checks which may neither reduce the deposit balance in the account against which they were drawn nor increase the deposit balance in the account to which they are credited are treated as deposit balances. It seems more reasonable to treat checks which are cleared within a bank account at the time of bank posting for what they really are—namely, a distinct form of money independent of deposit balances.

Mr. Villard's criticism warrants mention of an additional point. Checks which are cleared within bank accounts have nothing to do with velocity in the sense of a "turnover" of deposit balances. Only to the extent that intra-account clearing is incomplete does a transfer (turnover) of a deposit balance occur. While clearing within a bank account is unlikely to be complete at any one posting, the writers have reason to believe that the volume of intra-account clearing which does occur in this country at each bank posting represents a substantial proportion of the total volume of monetary transactions in any given period.[6] The intra-account clearing process, in other words, greatly restricts the quantitative importance of velocity in the "turnover" sense. Mr. Villard is undoubtedly concerned about the implications of this process for the theoretical significance of exchange velocity since, given our definition of a deposit balance, "the rest of the argument . . . follows logically."[7]

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[1] "A Neglected Component of the Money Supply," *Am. Econ. Rev.*, Sept., 1939, pp. 514-520.

[2] "A Note on Offset Checks as a Component of the Money Supply," *Am. Econ. Rev.*, Dec., 1939, pp. 798-799.

[3] *Loc. cit.*, p. 799. [4] *Loc. cit.* [5] *Loc. cit.*

[6] Unpublished, sample data from selected bank accounts support this belief.

[7] *Loc. cit.*

Comment on "Offset Checks as a Component of the Money Supply" by Mr. Villard

Professor Villard objects[1] to Dice and Schaffner's definition of deposits as credit balances[2] because it "would make impossible the calculation of the (exchange) velocity of money. It is now possible," he writes, "to derive such velocity from total debits and total deposits." He suggests as a proper definition of deposits "the amount of checks which will be honored when drawn by an individual."

Every deposit of a check places an accounting credit in the account of the depositor which according to Mr. Villard represents for a moment at least the acquisition of a credit balance. However, such credits are invariably accompanied by debits to the accounts of the check writers. Consequently if we are to compare the accumulated sum of credit balances which have had a momentary existence to debits to individual accounts the velocity figure will remain constant since every check written will increase the numerator and denominator equally. On the other hand, if we use in the denominator of the formula not *funds* deposited but the check writing ability of depositors as of some given moment, we are back to Dice's definition of deposits as credit balances after posting.

The fact that all debits to deposit accounts do not represent transfers of existing credit balances can be illustrated by a case in which credit balances do not exist. Suppose that A plans to deliver $100 worth of merchandise to B, that B plans to deliver an equivalent worth of produce to C, and that C plans to deliver $100 worth of his goods to A. Assume further that all deliveries are to occur within a given month, settlement to be made on the first day of the following month, and that these three individuals represent a complete economy. Finally, assume that neither A, B, nor C, have a balance at the bank, or, if this seems extreme, that such balances as they have are purely nominal in the sense that they are the minimum necessary to get their names on a ledger page, *i.e.*, $1.

Under these assumptions it will be possible for each to pay for the goods which he receives with a check written in anticipation of the check which he is to receive. Thus on the settlement day A, B, and C will each write one check for $100, and will each receive one check for $100. Upon depositing these checks each will have his account credited for the check he deposits, and a few minutes or a few hours later[3] will have his account debited for the check which he wrote. Total debits to individual accounts will be $300, total funds deposited will also be $300, but it will be impossible to conclude that credit balances were transferred from account to account since *before, during,* and *after* the transactions aggregate credit balances were zero (or else the nominal sum of $3 which did not change). The significance of a velocity figure (*i.e.*, $300 \div 0$) in this situation is difficult to ascertain.

The example illustrates how, when receipts periodically offset payments, any number of transactions may be financed without changing the quantity or altering the location of existing credit-balances. It also suggests the real significance of deposits since credit balances become essential only to the extent that transactions

[1] In a communication to the *Am. Econ. Rev.*, Dec., 1939, p. 798.

[2] "A Neglected Component of the Money Supply," *Am. Econ. Rev.*, Sept., 1939, pp. 514-520.

[3] The length of time depends upon whether the individuals deal through one bank, or several banks. If several banks are employed, the time will vary accordingly as the banks are located in the same or different towns.

in goods fail to clear. Consequently to divide total debits to individual accounts by the amount of existing credit balances does not indicate the number of times credit balances were transferred between the depositors of banks, but rather gives a figure which is the reciprocal of the percentage of aggregate goods exchanges that did not clear during that period.

WILFORD J. EITEMAN

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Comment on a Neglected Component of the Money Supply

In an article entitled "A Neglected Component of the Money Supply" in this *Review* (September, 1939), the authors argue that because of the virtually simultaneous intra-account clearing of checks an important component of the money supply has been overlooked.

All the commercial banks regarding which I have any detailed knowledge require that the collected balance of an account be sufficient to cover any checks drawn on that account. Checks deposited for credit to an account ordinarily require from one to several days before the amounts involved become collected balances. This is well understood by all business-men with whom I am familiar, and the banks in this part of the country at least seem to make frequent analyses of accounts in order to assure themselves that checks are not being drawn against uncollected balances.

It occurs to me that the authors of the article in question would have avoided what appears to be a serious error in their deductions if they had known more about the credits to the business firm's bank account which is shown in connection with their article. I suggest that those credits, especially some of those involving even amounts and fairly substantial sums, may represent deposits of the proceeds of borrowed funds or cash obtained from some other source. In any event, I am quite sure that few banks today will permit substantial drafts against uncollected balances.

If my knowledge of the existing situation is correct, the so-called "neglected component" must be quite negligible in total amount, and therefore it should perhaps remain a "neglected component" in so far as students of monetary theory are concerned.

E. C. HARWOOD

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Mill on Machinery

It is commonly thought that John Stuart Mill had serious doubts about the social benefits of machinery because of the oft-quoted passage in his *Principles of Political Economy:* "Hitherto (1848) it is questionable if all the mechanical inventions yet made have lightened the day's toil of any human being."[1]

Citing and apparently commending this statement, Karl Marx goes on to say that the capitalistic application of machinery is not for the benefit of the laborer, but merely to lengthen the portion of his time which he gives without an equivalent, to the capitalist and, therefore, it is but "a means for producing surplus value."[2] Many other illustrations could be given of similar misunderstanding of

[1] Book IV, ch. vi, sec. 2.

[2] *Capital,* vol. i, part i, ch. xv, sec. 1.

Mill's meaning in this connection. For example, Stuart Chase writes: "In the midst of this period, John Stuart Mill propounded his famous question of whether all the labor-saving devices invented to date had lightened the work of any human being. By and large they had not."[3] So also Lewis Mumford writes of Mill as agreeing in this respect "with the most bitter critic of the new régime, John Ruskin."[4]

That these and similar citations are beside the mark may readily be seen by referring to other quotations from Mill. For example, in the chapter on circulating and fixed capital he wrote: "Nevertheless, I do not believe that, as things are actually transacted, improvements in production are often, if ever, injurious, even temporarily, to the labouring classes in the aggregate . . . every improvement, even if for a time it diminish the circulating capital and the gross produce, ultimately makes room for a larger amount of both than could possibly have existed otherwise. It is this which is the conclusive answer to the objections against machinery; and the proof thence arising of the ultimate benefit to labourers of mechanical inventions, even in the existing state of society, will thereafter be seen to be conclusive."[5]

A glaring contradiction, surely, between these statements and the more familiar and pessimistic quotation so often cited by socialists and technocrats. But that is easily resolved by noting that Mill, as a Malthusian, believed that all the benefits coming to the laboring class from an increasing demand for their services, were speedily taken away by the increase of population. Thus he wrote: "All these improvements make the labourers better off with the same money wages, better off if they do not increase their rate of multiplication."[6] Wherefore he hoped for the coming of a stationary state in which improvements should continue while population ceased to multiply. When, therefore, writers cite the passage in question they should give the context thus:

"Only when, in addition to just institutions, the increase of mankind shall be under the deliberate guidance of judicious foresight, can the conquest made from the powers of nature by the intellect and energy of scientific discoverers become the common property of the species, and the means of improving and elevating the common lot."[7]

J. E. LeRossignol

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How Dead Is the Benefit Theory?

Because Professor Simpson's article[1] on the rise and decline of the benefit theory is both illuminating and interesting, it is also provocative of additional comments. This note is not intended to challenge any major part of his argument, but rather to extend it to a related point.

Few persons would contend, even prior to Simpson's exposé, that the entire property tax burden is distributed in accordance with the benefit principle. Recent attempts to "reconstruct" the *ad valorem* levy on property as strictly a

[3] *The Economy of Abundance,* p. 81.
[4] *Technics and Civilization,* p. 205.
[5] *Principles,* Book I, ch. vi, sec. 3.
[6] *Ibid.,* Book IV, ch. v, sec. 2.
[7] *Ibid.,* Book IV, ch. vi, sec. 2.
[1] "The Changing Theory of Property Taxation," *Am. Econ. Rev.,* Sept., 1939.

benefit tax have been abortive and unfruitful, as was to be anticipated. It does not follow, however, that the ability theory is in exclusive possession of the property tax domain. Rather, the two theories have a joint interest in the field, and the division of fractional equities is yet to be established with precision.

Confusion of thought and issues is likely to result from speaking of *the* property tax, as though it were one simple levy imposed for the support of an integrated group of governmental functions. Actually it is an aggregate of individual levies, imposed on a common tax base, but made for the support of manifold heterogeneous functions. No two of the several levies that constitute the total or consolidated millage levy need stand in the same relation to the benefit and ability principles. To look for a single, simple, theoretically unifying distributive principle is to search for the end of the rainbow.

It is not difficult to cite individual levies that clearly exemplify the ability theory. Examples of such are the levies made for the support of general government, education, public health, and the like. In contrast, examples of levies based on the benefit principle are not as numerous or as clear-cut. If an *ad valorem* levy distributes the tax burden according to the same pattern that would obtain if an equal amount of revenue were collected by means of fees, and if the imposition of fees or other direct benefit charges is a practicable alternative method of collection, it seems reasonable and proper to assume that such an *ad valorem* levy is based on the benefit principle. This conclusion is especially obvious in cases where the equating of costs and benefits was originally the primary objective, and it was found that the most reasonable way of attaining this goal was by apportioning costs in direct ratio to the taxable property values within the districts benefited. The millage levy for fire protection on forested and wild lands in the unorganized territory of Maine, and the flood protection taxes on Mississippi Delta lands that are guarded by levees, are examples in point. Attention might be directed to many other levies that are predicated in large part, although not entirely, on the benefit principle.

In yet another respect the concept of benefit impinges forcefully upon the field of property taxation. The area over which the millage levy is spread for the support of a given function is ordinarily coterminous with the territorial range of distribution of the benefits arising from the performance of that function. This is true—and by design rather than accident—of a majority of all functions supported by *ad valorem* levies. Rural children may not attend city schools without the payment of special tuition; fire-fighting equipment may not be transported beyond the limits of the city that owns it, unless contractual arrangements have been made prior to an emergency; the hospitality of "county farms" is extended only to persons of established residence within the county. A new function is ordinarily accommodated to the existing pattern of taxing jurisdictions; if this cannot be done except at a serious sacrifice of efficiency in the performance of the function, a geographically distinct *ad hoc* district may be created. Such territorial identification of tax and benefit, which is now firmly imbedded in our fiscal mores, must be attributed in large part to the influence of the benefit principle.

Whether or not a particular function is supported by an *ad valorem* levy may depend on the feasibility of establishing territorial coincidence of levy and benefit. For example, forest fire suppression funds are commonly raised by specific acreage fees, but there is an increasing tendency on the part of those rural counties in which forestry is the predominant type of land use to make the necessary appropriations out of general funds. Again, in Fairfax County,

Virginia (which is partly suburban and partly rural), a flat charge per household is made for garbage collection throughout the closely settled suburban area; in contrast, in the adjoining and entirely urban city of Alexandria this service is financed in entirety by an *ad valorem* levy.

In sum: even though that old gray mare Benefit Theory ain't what she used to be, she still ain't glue.

RICHARD W. NELSON

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Indifference Curves versus Marginal Utility

Would students who are receiving their first instruction in economic principles find the indifference curve analysis leading up to the individual demand schedule less reasonable or more difficult to grasp than the marginal utility analysis which now appears in all elementary textbooks? In view of recent writings in which advantages of the indifference curve analysis are set forth, the possibility of teaching this approach to beginners is becoming a rather important problem.

An experiment along this line was attempted by the writer in a class of 35 students who, with the exception of one or two individuals, had no economic background and were receiving their first introduction to economic principles. The instructor gave an equal amount of time to the two explanations, and endeavored, as carefully as his limited ability would allow, to be as fair, as lucid, and as unbiased in one presentation as in the other. Both theories were shorn of excessive complexity and presented on the level usually maintained for sophomore classes.

After both theories had been presented, the following question was asked: "As an explanation of the demand side of the market behavior of the individual, which theoretical approach seems to you to be (1) more easily understood, (2) more logical, and (3) more nearly in accordance with actual experience—the marginal utility analysis or the indifference curve analysis?"

The verdict of the class was almost unanimous in favor of the indifference curve approach on each of the points. Moreover, a written examination a few days later in which questions were asked concerning each of the two theories indicated that the students had grasped the indifference curve analysis quite as well as, if not better than, the marginal utility analysis.

While this experiment may be merely an exceptional case that proves nothing, since the numbers involved were small and since the students were not informed critics of economic doctrines, it may suggest to other instructors that similar experiments would be interesting to try, or to someone who is now writing an elementary textbook that he include such a presentation. Moreover, it may suggest that a theory which sometimes seems quite difficult to an individual because it does not readily fit in with his previously acquired patterns of thought, may seem much less difficult and unusual when presented to a group of students who have not yet formed any patterns for economic thinking.

CLAUDE E. PUFFER

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Note on "The Rise of Monopoly"

Leading economists for more than a century after the appearance of the *Wealth of Nations* described the typical economy of the period as essentially com-

petitive in character, with monopoly portrayed as the infrequent exception to the general rule. In recent years, on the other hand, there has been much discussion of a so-called "rise of monopoly" during the past several decades which has transformed the "highly competitive" economies of the past century into the "highly monopolistic" economies of the present.

If one is to approach discussions of the theory of competition and monopoly and of their significance to public policy with proper perspective, it is essential to bear in mind that this "rise of monopoly" is assignable to two developments: (1) an evolution in economic conditions; and (2) an evolution in the use of economic terminology.

Apparently the most common usage of the term "monopoly" in economic discussion has been to imply thereby a condition of complete or exclusive possession or control of some good or service (or of the demand for such good or service), of some combination of such things.

When the term is used in this customary manner, it is apparent that the number of instances of monopoly said to exist in the economy of a country will be dependent upon (1) the number of recognized "objects" of possible monopolization, (2) the size of area within which exclusive possession or control is referred to as "monopoly," and (3) the number of instances of exclusive control present in the recognized areas among the recognized objects of possible monopolization.

Other things equal, the number of monopoly positions ascribed to a given area will be increased by an increase in the number of *recognized* objects of possible monopolization within that area. An increase in the number of commodity or service items as a result of technological or marketing developments—with the proportion of monopolized to the total of items remaining constant—will give rise to *a greater number of instances of monopoly* position. The number of recognized objects of possible monopolization may be increased also by adoption of a more detailed classification of economic goods and services. The greater the refinement of such classification, the greater will be the number of instances of exclusive control, or monopoly, said to be present. If, for instance, all brands of automobiles are lumped together in one commodity class as "automobiles," monopoly would not be recognized as present in a market supplied with a dozen different makes unless one enterprise or combination controlled the supply of all brands. If each brand of automobile, on the other hand, is thought of as a "differentiated commodity," the obvious result of the classification refinement—assuming each brand to be provided by a separate enterpriser—is the "creation" of a dozen monopoly positions and a dozen monopolists. The number of monopoly positions which may be "created" by refinements in the classification of commodities and services is limited, naturally, only by the degree of refinement adopted in such classifications.

Obviously, the smaller the area within which exclusive control is designated "monopoly," the greater will be the number of instances of monopoly position recognized as present. If, for example, the possible monopolization area in the market for undifferentiated "land" is taken as the nation or state, "land monopoly" would not be considered to exist at all in our country. A progressive reduction in the size of territory within which exclusive control by one person or group should be referred to as "monopoly" would result, of course, in recognition of an increasing number of "land monopolies," as such possible monopolization area is reduced from that of the nation or state to that of the county, the township, the municipality, or any other smaller area thought to be worth economic consideration.

Assuming a given number and method of classification of economic goods and services and recognition of given-sized areas as regions of possible monopolization, tendencies which bring increasing proportions of the commodity or service units in a given class or in a number of classes within a given area under unified control and which extend these positions of unified control to broader areas will tend to increase the number of monopolies said to be present.

The "rise of monopoly" since those earlier days of reputedly widespread "pure" or "perfect" competition may be accounted for, therefore, by (1) the addition of new and exclusively controlled commodities and services to the stock of exchangeable items by means of marketing or technical change; (2) the development of additional positions of exclusive control over old commodity and service items and extension of such exclusive positions to greater areas; (3) the adoption, in recent years, of a much more refined classification of economic objects in the literature of economic theory; and (4) a tendency in modern economic writing to break down the broader market areas into a greater number of markets or sub-markets. That portion of the "rise of monopoly" due to the first two developments is the result of significant economic changes. That portion of the "rise of monopoly," on the other hand, which is due to refinement in commodity and market classifications is only a rise in the application of the term "monopoly" to situations formerly not so designated.

A number of significant implications for economic theory and public policy may be drawn from the foregoing considerations. Among the more obvious are the following:

(1) That economists of the Classical School would have recognized much more monopoly in the economies of their time if they had differentiated commodities and markets by the same methods employed in the present literature of imperfect or monopolistic competition theory;

(2) That imperfect or monopolistic competition theorists of today would discover much less monopoly in the modern economy than they do if they followed the less refined usage of the terms "commodity" and "market" adhered to by economists of the Classical School;

(3) That the "monopolists" of present-day economic theory and the "monopolists" of the days of Classical economics are not to be adjudged similar, in all cases, in their economic power and practices merely because they have been designated by the same term; and

(4) That "monopoly" and "monopolists" can be discovered in modern markets customarily referred to (even in some imperfect or monopolistic competition theory) as perfectly or purely competitive by the adoption of still more detailed commodity and market classifications derived from a still more detailed application of the principle of differentiation.

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General Works, Theory and Its History

The Economic Basis of Class Conflict and Other Essays in Political Economy. By LIONEL ROBBINS. (London and New York: Macmillan. 1939. Pp. xiv, 277. $2.25.)

Professor Lionel Robbins of the London School of Economics discusses the problem of the relation between the interests of society and the interests of different groups within society, and the extent to which organizations facilitating group exclusiveness may be the cause of social disharmony.

Although the book consists of a series of essays presented separately over a brief period of years, there is a definite continuity of related interest in the examination of forms of restrictive policy similar to those that are now being investigated by the Temporary National Economic Committee (the Monopoly Investigation) in Washington, D.C.

Today the concept of class conflict is expressed in the attempts of various groups to capture the market through such techniques as state imposed monopoly or monopolist controls within the organization of production in a system of free enterprise. It is a prerequisite of such a system that the market should not be controlled or dominated by any particular set of group interests. Professor Robbins divides his book into two parts. Part 1 deals with this topic under the title of "The interests of groups and the interests of society." Part 2 is concerned with "Government expenditure and economic activity."

In spite of the rise of argument supporting the inevitability of monopoly, Professor Robbins is not disposed to accept completely this interpretation of the problem, nor does he support the contention that monopoly, if generalized, will be easier to control. On the other hand, the system of free enterprise requires the removal of economic restrictions if a greater amount of income is to be available for distribution. Such a process of distribution is dependent on a further clarification of the principles underlying the operations of the market rather than the introduction of artificial prices maintained by protectionist schemes at the expense of other groups in the community. The reviewer was particularly impressed with the parallel provided by this British study in the analysis of more or less concealed relationships of monopoly with other significant social problems such as unbalanced budgets, trade barriers, housing, and even war and peace, that has recently been published under the title of *Organized Scarcity and Public Policy* (by Harry D. Gideonse, Public Policy Pamphlet No. 30, University of Chicago Press, page 5). In the same pamphlet here, too, contrived scarcity is stressed, not only on the capitalistic and entrepreneurial side, but on the part of the farmers, trade unions, and the professions; and political

implications are emphasized, because the contrived scarcities lead to idle men and idle capital, thus building up "a wide and heterogeneous public for silver-tongued orators."

Professor Robbins points out that some of the fallacies of economic nationalism are due to the inability on the part of the supporters of this doctrine to distinguish between property and territory. Thus a citizen of one country has a direct financial return from property owned at home or abroad, but it is an advantage of a different kind, so far as he is concerned, for his government to "own" extensive areas in other parts of the world.

Further emphasis is placed by the author on the fact that policies of restriction, whether in the realm of territorial sovereignty or agricultural planning, have a definite affinity with collectivist planning. Advocates of this type of planning imply that the system of free enterprise is no longer capable of functioning with the rôle of the state in the position of umpire, and that it is now necessary to transfer to the position wherein the state directly or indirectly assumes the position of control formerly exercised by the price mechanism in a free society.

Surely the recent practices of the totalitarian states in Europe are sufficient proof that governmental planning ends in intolerance of minority views and disregard of minority rights, as well as placing the planners and administrators themselves in the position of a new class based on loyalty to the "common cause."

As Professor Robbins' book appeared before the outbreak of the second World War, some of the major proposals in part 2 will have to be postponed for later practical consideration. However, he voices the hope that the democracies of Europe may be preserved in a structure of economic federalism, leading to a United States of Europe, thus finding the basis for a new common expansion that could be the foundation upon which free institutions could be built to endure.

FINDLAY MACKENZIE

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An Outline of International Price Theories. By CHI-YUEN WU. (London: Routledge. 1939. Pp. xii, 373. 15s.)

This comprehensive and careful study was, as Professor Robbins points out in his introduction, commenced when the author was a member of the economics seminar at the London School of Economics and completed "amid the distractions of actual war" (in China). It undertakes to trace the development of the theory of international prices from the early mercantilist period to the present time. Up to a point, perhaps, it seems to duplicate the work of Professor Angell in the same field;[1] but in the thir-

[1] J. W. Angell, *The Theory of International Prices: History, Criticism and Restatement* (Cambridge, 1926).

teen years which have elapsed since the appearance of Angell's book, the theory of international prices has been enriched by a number of significant contributions which have served not merely to point the way to solution of certain difficult problems but also to throw new light on earlier controversies. One might add, however, that Professor Viner's recent book on the theory of international trade,[2] while obviously not concerned exclusively with the monetary aspects of the subject, does devote considerable attention to the history of international price theories and covers much of the recent literature in that field. Hence, the major portion of Dr. Wu's material has been worked over by other writers.

Dr. Wu introduces his study with an excellent outline of the issues which have occupied the attention of international price theorists and is perhaps at his best, throughout the book, when he is engaged in tracing broad lines of development. His exposition of individual theories is, on the whole, satisfactory. He does not overwhelm the reader with a tedious discussion of innumerable minor writers but rather adopts the procedure of selecting the more representative and important writers in each period for detailed consideration. As might be expected, English theorists receive the major share of attention, although the outstanding Continental writers are brought into the discussion at appropriate points. One Continental theorist, whose contributions were largely ignored in English publications prior to 1930 but who has received widespread recognition since that time, is Knut Wicksell. Dr. Wu, in line with other recent writers, assigns to Wicksell a prominent place in the history of the controversy over the "transfer problem" and, indeed, christens the theory which emphasizes the importance of shifts in demand in the paying and receiving countries "the Wicksellian theory of transfer."

Despite the quality of most of his work, Dr. Wu falls down noticeably at certain points. He is perhaps weakest in his attempts at criticism of the various theories under consideration. His critical passages are at times unnecessarily repetitious. His handling of the Bank Charter act controversy is especially disappointing. He dismisses the views of the "Banking School" as "erroneous" while offering an inadequate criticism of the views of the "Currency School." Of least value are the chapters devoted to developments since 1918. Dr. Wu's treatment of the purchasing-power-parity theory runs largely in terms of a criticism of Cassel's early, naïve version and hence fails to provide an adequate critical evaluation of more sophisticated versions of the theory. His handling of the "transfer problem" is more successful, but the reader would appreciate a fuller discussion of the contributions of Robertson and Pigou, which Dr. Wu recognizes as being of some significance. Again, his presentation of Professor Ohlin's attempt to extend the mutual interdependence theory of pricing to the field of international trade leaves much to be desired.

[2] J. Viner, *Studies in the Theory of International Trade* (New York, 1937).

To point to the weaknesses of a book of this kind, however, is not to deny the very real value of Dr. Wu's work. He provides us, particularly for the earlier period, with a scholarly and readable history of international price theories, not the least of whose merits is that it confines itself to manageable proportions.

MARGARET S. GORDON

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Introduction à l'Etude de l'Economie Politique. By GAËTAN PIROU. (Paris: Sirey. 1939. Pp. 303. 50 fr.)

This is a highly commendable, up-to-date treatise on political economy, the fruition of over a decade of teaching. Part 1 is a descriptive exposition of the contours of the vast field of social science of which political economy is a segment. Pirou capably discusses the essentials of recent and past analyses of scientific knowledge. He briefly alludes to the history of the affirmations of social determinism, to him identical with social science. After sketching the elements of the conflict between social determinism and the free will of man, he offers a critical survey of the biological and psychological interpretations of social facts, the general tenets of formal sociology, and the scientific positivism in political, moral and religious sociology. All this is so much spade work indispensable to knowing to what extent and under what conditions political economy can be regarded as a science. While the author is not entering into the comparatively recent debate about the nature of the object of political economy, he offers a carefully considered definition of it, whose major consequences he duly assesses. Discussing those definitions of political economy which deal with the nature of the end pursued and the nature of human conduct, he closes part 1 by briefly summarizing the frontiers of political economy in relation to technology, law, and morality.

Part 2 confines itself to an intricate analysis of the method of political economy. The conflict of methods indicates that a large number of economists, perhaps the majority, regard the positive method of the physical sciences as inapplicable and sterile. In their view the facts of economic life call for their own particular method, giving them a smaller place, and assigning to reasoning a much larger rôle. Pirou offers a critical and constructive statement of the positions of the partisans of the abstract and positive methods. Apparently favoring the possibilities of the tools of research of the positive method, Pirou critically discusses the various modalities of this method: its use of graphs, of statistics, of the monograph, and of the realistic aid of the historical method. He concludes with a balance sheet of the two methods and of mathematical economics.

Part 3 is devoted to a rapid panorama of the history of political economy. Strictly speaking Pirou regards political economy as comprising not

only economic science but also the study of the evolution and influence of its doctrines. Hence a pertinent survey of the main tenets of the principal doctrines throughout recorded history is excellently sketched. It is an up-to-date schematic picture of some of the gross facts of economic, political and intellectual history, without which the appearance, progress and decline of the great doctrinal systems would be incomprehensible.

Part 4 is a critique of the classical plan of dividing political economy into the production, circulation, division and consumption of riches. Pirou's substitute plan includes first the external view of the *cadres* of economic life as constituted by juristic rules and the state of technology. Next it stresses the facts of the internal mechanism of economic life, utilizing the researches of historians, the analyses of institutionalists, and the inquiries of sociologists. Third, political economy devotes itself to a study of the national and international economic problems. A fourth part comes to grips with economic doctrines. Throughout this capable work detailed bibliographical material is quoted, comprising the relevant literature in French, German, English and Italian.

HERMAN HAUSHEER

Taylor University

NEW BOOKS

ADAMS, M. *Getting and spending.* Peoples lib., vol. viii. (New York: Macmillan. 1939. Pp. 125. 60c.)

BAUDIN, L. *Le mecanisme des prix.* (Paris: Lib. Gén. de Droit et de Jurisprudence. 1940. Pp. 153.)

BLAKE, W. J. *Elements of Marxian economic theory and its criticism.* (New York: Gordon. 1939. Pp. viii, 746. $3.75.)

CARLSON, S. *A study on the pure theory of production.* Stockholm econ. stud. no. 9. (London: P. S. King. 1939. Pp. vii, 128.)

CATHERWOOD, B. F. *Basic theories of distribution.* (London: P. S. King. 1939. Pp. 262. 12s.)

CRONIN, J. F. *Economics and society.* (New York: American Book Co. 1939. Pp. xvii, 456. $2.50.)

This book is intended to be "most useful in a general introductory course for one year, given both to general students as a part of a modern liberal arts course, and to business students for the purpose of background and orientation." Part 1 deals with the physical, historical and legal background of modern economic life; with price determination, competition, monopoly and the business cycle; and with economic systems. Part 2 deals with special problems: labor; the consumer; taxation; agriculture; international trade; money and banking; investment and speculation; public utilities and government ownership.

The treatment is the presentation of an economic philosophy with some current factual information as the vehicle. Liberal capitalism, laissez faire, the modern system of finance domination, communism, fascism and moderate socialism are all condemned. Christian social principles only can be the solvent for present-day difficulties.

The author emphasizes the social philosophy of Pope Pius XI in his various

encyclicals. And this is to be achieved by "the corporative spirit . . . as found in Portugal and Italy, rather than the system existing under American corporation law," acting through organizations akin to the medieval gilds, so that "class strife would be replaced by class harmony" (p. 167).

As a descriptive presentation it does not give both sides of the story on controversial matters. Medieval life evidently approximated the Golden Age, while capitalism is responsible for every problem that has arisen since then. Not only has communism nothing to commend it but it has done nothing for Russia, while in Germany, Italy, Portugal and Nationalist Spain "the authoritarian [fascist] state is in many ways an economic and political success" (p. 178). The details in the chapters on problems are selected almost entirely from the period since 1933.

The chapters on value and price, covering 50 pages, give practically no equipment with which to analyze value and price problems; marginal cost is not mentioned, and diminishing utility is defined in historical terms. The business cycle is caused primarily by the failure to give adequate income to the poorer classes (p. 131).

D. F. PEGRUM

DEARLE, N. B. *Economics: an introduction for the student and for everyman.* (London and New York: Longmans Green. 1939. Pp. x, 522. $2.50.)

EUCKEN, W. *Die Grundlagen der Nationalökonomie.* (Jena: Fischer. 1940. Pp. xii, 300. RM. 11.50.)

FANNO, M. *Normal and abnormal international capital transfers.* Stud. in econ. dynamics no. 1. (Minneapolis: Univ. of Minnesota Press. 1939. Pp. xi, 120. $2.)

FENG-TIEN, C. *Economic thought during the last fifty years of the Ch'ing period.* Yenching Jour. of Chinese Stud., monog. ser. no. 18. (Cambridge: Harvard Univ. Press. 1939. Pp. 324. $3.)

GREIDANUS, T. *The development of Keynes's economic theories.* (London: P. S. King. 1939. Pp. 40. 2s.)

This brochure is a criticism of Keynes's *Tract*, *Treatise* and *General Theory.* The author finds the beginning of Keynes' apostasy in his early writings. Professedly adhering to classical principles, he departed from them slowly and then made a final break. In the *Tract,* Keynes departed from Marshall's conception of the origin of the value of money (p. 4). The equations of the *Treatise* are criticized for reasons which led Keynes himself to revise them in the *General Theory.* What Greidanus does not like is the mechanical character of the equations. He claims that they cannot show causation because they merely classify causes retrospectively. "The simple reason for their failure," he says, "is their departure from the psychical basis used in explaining the motivation of economic phenomena" (p. 19). He does not seem to see that this criticism can be made against all formal theory. We get an explanation by examining data in terms of the formula to ascertain which are actually the causative factors.

The author finally comes to grips with Keynes's view that the motives which determine saving are different from those determining investment and expresses his belief that the classical structure cannot be so easily undermined as Keynes supposes. Greidanus (p. 25) evidences his acceptance of the old view which if true destroys the foundation of the *General Theory.* To the reviewer

he has not, however, given an adequate argument against the Keynesian position. He also criticizes the liquidity-preference theory of interest and concludes that Keynes has had a bad influence upon public policy (p. 39) and that his methods can never yield favorable results (p. 40). The author does not show, however, how to get along without formal equations, nor does he substitute any "real explanations" of his own to account for the failure of the rate of interest to adjust the supply of savings to the demand for capital.

WALTER A. MORTON

VON HABERLER, G. *Prosperity and depression: a theoretical analysis of cyclical movements.* New rev. and enl. ed. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. xix, 473. $2.)

Except for the insertion of one new chapter, this volume has undergone only minor revision. Nonetheless the additional material, undertaking a review of recent literature bearing on the business cycle, in particular the views of Mr. Keynes, fills a gap which existed in the first edition and serves to bring the book up to date. Nearly 90 pages are devoted to a detailed discussion of some of the more controversial aspects of the Keynesian schema.

Professor Haberler approaches this topic from the standpoint of reconciling, where possible, the new theories with older received doctrine. In this task he achieves noteworthy success: his contribution should be on the "must" list of everyone who would understand the Keynesian approach and its relation to more orthodox economic reasoning.

The new material opens with a lucid discussion of the question of the "necessary" equality of investment and savings. Keynes's position is compared with that of Robertson and with the Swedish *ex ante* analysis: the differences are clearly shown to be terminological and not substantial.

Perhaps his most noteworthy pages are those Professor Haberler devotes to a comparison of the Keynesian theory of interest with the analysis running in terms of the demand and supply of loanable funds. Keynes's tendency to ignore his "transactions motive" to liquidity is shown to be the source of many apparent differences. When it is recognized that a shift of funds from transactions to speculative uses and *vice versa* may occur, many of the seemingly paradoxical Keynesian dicta with respect to the lack of any relation between changes in the marginal efficiency of capital or in savings and the rate of interest are reconciled with the more conventional approach.

Examination of the interest rate problem is followed by an excellent discussion of the multiplier, wherein the logical nature of this device is contrasted with the practical difficulties of applying what is directly valid only of the individual (the marginal propensity to consume) to the community as a whole. Consideration of the theory of under-employment shows it to rest on the assumption of sticky wages.

Some readers may wish, with the reviewer, that Professor Haberler had carried his task of revision a little farther, in particular to the clarification of the sections dealing with the capital-shortage and the under-consumption theories. The treatment of these topics still leaves one feeling that they are not resolved as completely as might be possible. Nonetheless, with the revision provided in this edition, Professor Haberler's volume remains the best and most thorough general treatment of the business cycle available.

P. T. ELLSWORTH

HASKELL, G. D. *Questions and problems in economics.* To accompany: FAIRCHILD, FURNISS, and BUCK, *Elementary economics,* vols. i and ii, 4th ed. (New York: Macmillan. 1939. Pp. viii, 88.)

HEMPEL, E. H. *Industrial political economy: the fundamentals.* (New York: Pitman Pub. Corp. 1939. Pp. xiv, 454. $3.50.)

Ostensibly, this short book is an appeal from "theories and academic thinking" to the "true dynamics of economic action" as deduced from industrial history. The sketch of developing industrial organization and policy, from "Greece and Athens" to the present, is mainly conventional as far as it goes, but thin, disjointed and dull. It furnishes little support for the generalizations concerning the lessons of history which marks the volume off from ordinary cram-books. A good sample of these lessons will be found on page 42, comparing ancient Rome with fascist Italy; or the statement on page x of the preface may spare the judicious reader from subjecting himself to the rest.

MELVIN M. KNIGHT

HUGHES, R. O. *Fundamentals of economics.* New ed. (Boston: Allyn and Bacon. 1939. Pp. 528. $1.80.)

HUTCHISON, T. W. *The significance and basic postulates of economic theory.* (New York and London: Macmillan. 1938. Pp. x, 192. $3.)

The author of this book studied under Joan Robinson at Cambridge, before becoming lecturer at the University of Bonn, Germany. He is a positivist in philosophy and, though he assails certain propensities of neo-classical economists, his general approach to economics is that characteristic of this group. Beyond bald assertions—such as the gibe by Pareto at the opponents of mathematical economics, which is given a place of honor between the title-page and preface—not much is said in justification of these theoretical positions.

Within the limits thus indicated, Mr. Hutchison has treated the logic of economics. He deals with methods of reasoning and criticizes a number of familiar economic concepts, such as *ceteris paribus,* the notion of a fundamental economic principle, and that of a tendency toward equilibrium. Not all his conclusions are likely to meet with general acceptance but the discussions are suggestive and the controversial style that is adopted helps to drive home the arguments employed. Since most economists have made no special study of logic and are apt to reason loosely at times, probably there are few who would not profit from reading the book. The technique followed with regard to footnotes and quotations, however, may be found tiresome.

While his book is useful on the negative side, constructively Mr. Hutchison has less to offer. He suggests that the term "law" should be reserved for empirical generalizations, of which Gresham's law is an example. Such laws, he says, "it is the central object of science [including economics as he visualizes it] to discover." Aside from the matter of terminology, this is the viewpoint of many economists, and it is the basis of much of the realistic study that has been undertaken in the field. But Mr. Hutchison speaks of statistical verification as if it were relatively simple. It has to be remembered that statistics reflect "life as a whole," including responses to all kinds of stimuli, concerning many of which economists—as such—know little. Data often refer to phenomena remotely related to the things in which the economist is interested. Interpretation, therefore, presents a more serious problem than the author of this book appears to realize.

EDMUND WHITTAKER

IRVINE, W. *Walter Bagehot.* (London: Longmans Green. 1939. Pp. 303. 12s. 6d.)

KEESING, F. A. G. *Het evenwichtsbegrip in de economische literatuur.* (Purmerend: Muusses. 1939. Pp. 199. F. 3.50.)

KOLHATKAR, V. Y. and KOGEKAR, S. V. *An introduction to economics.* (Poona: Dastane Brothers' Home Service. 1939. Pp. 180.)

KOREY, E. L. and RUNGE, E. J. *Economics: principles and problems.* (New York: Longmans Green. 1939. Pp. xi, 687. $1.80.)

The outstanding feature of this high-school textbook in economics is that it is comprehensive enough to satisfy the requirements of most state and large-city courses of study. It also contains sufficient traditional material as well as institutional material to satisfy a large section of our teaching body. A limited but adequate and meaningful treatment of the theories of wages and interest is included. Ample explanation (5 pages) is given to the quantity theory of money so that it really means something to the immature student. The logical, clear and detailed development of the theory of market price should please any classicist. On the other hand, the instances in which our economic system plays Puck are also represented. The inclusion of discussion on chain-store legislation, deposit insurance, institutional theories of the business cycle, loss leaders, and monopolistic competition indicates the up-to-dateness of the book. Twenty-five pages are given to such social controls as minimum wage and maximum hour laws, social insurance, and the Fair Labor Standards act. The critical examination of both the contributions and limitations of the publications *Consumer's Union* and *Consumers' Research* as aids to the consumer is only one of a number of instances in which the authors show that they have not been overwhelmed by the gloss of novelty.

JOSEPH P. CROWLEY

LESCURE, J. *Des crises générales et périodiques de surproduction.* Tome I et II. (Paris: Domat-Montchrestien. 1938. Pp. xvi, 445; 453-702. 100 fr. les deux vol.)

LINVILLE, F. A. *An outline of economic principles and problems.* (New York: Saga Press. 1939. Pp. 217.)

Questions are adapted for use with texts by Atkins and Magee, Ault and Eberling, Bye, Bye and Hewett, Deibler, Ely, and Fairchild, Furniss and Buck.

LOGAN, H. A. and INMAN, M. K. *A social approach to economics.* (Toronto: Univ. of Toronto Press. 1939. Pp. xvi, 659. $3.75.)

MYRDAL, G. *Monetary equilibrium.* Translated from the German by ROBERT B. BRICE and WOLFGANG STOLPER. (London: Hodge. 1939. Pp. xi, 214. 12s. 6d.)

The long awaited translation of Professor Myrdal's important essay finally makes available to English and American economists one part of the thought of the virile Swedish school. Unfortunately, eight years have elapsed since its first publication in Swedish, during which time the center of interest and emphasis in monetary theory has veered away from the Wicksellian analysis, as is shown by a comparison between the *Treatise* and the *General Theory* of Mr. Keynes. Rather than revise and rewrite the book completely, the author very wisely decided to "avoid changes other than those intended to make the text clearer and more consistent."

The method of exposition followed is that of "immanent" criticism of Wicksell's thought. The latter, sensing the superficiality of the quantity theory of

money and equation of exchange, attempted to build up concepts which would coördinate monetary theory with the theory of central price formation, and which would at the same time break through the straight-jacket of Say's law of markets. This culminated in his formulation of equilibrium as being achieved only when (1) the money rate of interest is equal to the natural rate, (2) saving equals investment, (3) the price level of consumer's goods remains constant. Professor Myrdal is at his best in showing how the concept of the natural rate of interest must be modified when applied to a monetary society, and how these three criteria for equilibrium are not mutually consistent. The fundamental one to be retained is the second in which savings and investment *ex ante* must be equal. In the absence of this equality a one-way, cumulative, disequilibrating movement is generated. Chapter 5 on "Savings and investment" is to be particularly recommended. The last chapter is refreshing in view of prevailing methodological misconceptions.

Fundamental inadequacies of the book from more recent points of view are an undue emphasis upon the importance of price and interest rate movements as compared to those of output and employment, insufficient stress upon the passive reaction of consumption and savings to changes in income. Most important is the lack of realization that monetary equilibrium in the author's sense could conceivably involve 50 per cent unemployment in addition to frictional and structural (monopolistic) unemployment so that it in no sense represents a proper goal of policy. Moreover, according to a rigid assumption of passive consumption, monetary equilibrium might be achieved at any level of income depending only upon the level of net investment.

PAUL A. SAMUELSON

PARKES, H. B. *Marxism: an autopsy.* (Boston: Houghton Mifflin. 1939. Pp. 299. $3.)

Despite the flamboyance of the title, the book gives a thorough-going discussion of the social movements of our age and a penetrating review of the Marxian system of thought. The author subjects to an impressive critique the Marxian theory of history, of the statics and the dynamics of capitalist society and especially the politics of Marxism. He successfully answers the question why the proletarian revolution failed to come in the economically and socially advanced countries but did come in backward Russia by pointing out that the organized labor movement is society's policeman against a leftist revolution. He correctly points out that Marx's forecast of the collapse of capitalism had little to do with the Hobsonian theory adopted by the New Deal but everything to do with the falling rate of profit due to a rise in the proportion of "constant" capital to "variable" (or payroll) capital.

The author is a progressive who wishes to see capitalism reformed to provide security for the masses but not *via* a planned economy which he insists leads to dictatorship. He proposes a forcible reduction of the rate of interest and a recognition of the worker's property right in his job but with wages left completely flexible. Beyond that he contemplates a transformation of the capitalistic corporations into producers' coöperatives, and national and international economies based on a free market. To the reviewer this plan appears as a throw-back to the "greenbackism" of the sixties of the past century with its ideal of the escape from the wage system into "self-employment" *via* the coöperative workshop buttressed up by an access to "free" capital. The author

does not explain how he would solve the management problem in these co-operatives.

S. PERLMAN

ROLL, E. *A history of economic thought.* (New York: Prentice-Hall. 1939. Pp. 430. $3.)

This volume, first published in England in 1938, has now been brought out as an addition to the Prentice-Hall economics series. As the book is limited to approximately 400 pages, the treatment of the subject is necessarily brief, and many well known names have been omitted. The basis of selection of material is clearly stated in the introduction. "First, apart from the most outstanding economists of the past, only those have been included whose contributions to economic thought appear to have significance in relation to present-day theory and controversy. Secondly, stress has been laid both on writers and views which exemplify most clearly different trends of thought" (p. 18). The author's judgment on these points is indicated by the distribution of space. For example, 10 pages are devoted to Thomas Mun, 10 to the Physiocrats, 11 to Senior, 14 to Sir William Petty, 15 to John Stuart Mill, 18 to Ricardo and 32 to Adam Smith. The discussion of socialistic criticism and the doctrine of Marx covers 67 pages, or one-sixth of the entire book. For purposes of comparison we may note that in Haney's history the discussion of socialistic thought comprises less than one-seventeenth of the total space.

Professor Roll states that his book is "based on the conviction that the economic structure of any given epoch and the changes which it undergoes are the *ultimate* determinants of economic thinking" (p. 16). Although he points out that the economic factor is the determinant only in the final analysis, his discussion represents a somewhat rigid economic interpretation of history. This perhaps explains a tendency to draw rather sweeping conclusions without detailed examination of conflicting evidence. For example, the rise of mercantilism is explained in definitely economic terms, with little attention given to state-making as a basic consideration. In opposition to the views of Schmoller and Professor Heckscher the mercantilists are described as having considered state-making important only because a strong state could best further and protect their economic interests. Obviously this is a question that invites extended argument.

Considering its brevity, the book presents a good discussion of the development of economic thought, from the author's particular point of view. Some of the topics are very skillfully treated, especially those dealing with the early development of economics and the rise of classicism. There is also a short but useful working bibliography. It is to be regretted, however, that the author has not attempted a more careful evaluation of conflicting views on the various controversial questions. American readers, moreover, will note the lack of consideration of economic thought on this side of the Atlantic. Certainly it would seem that a chapter might have been devoted to American contributions, including, of course, a discussion of Veblen and the rise of institutionalism.

J. E. MOFFAT

ROSS, E. J. *What is economics? A brief survey of our economic life.* (Milwaukee: Bruce Pub. Co. 1939. Pp. x, 275. $2.)

Dr. Ross, in addition to thorough academic training in several universities,

has had seven years of business experience, which have contributed to the solidity and practicality of her book. For the most part the discussions are of timely interest—the sit-down strike and the totalitarian state come in for attention; "corporatism" and "distributism" are not overlooked. The volume contains questions for study based on the text and a selected bibliography.

Declaring in the foreword that "there is a general dissatisfaction with the present economic system," Miss Ross expresses her own dissatisfaction with a number of practices common to, if not inherent in, the capitalistic economy. The ethical note runs through Miss Ross's book, and the social point of view is expressed. Sympathy is shown for the worker; the author declares that he "needs to have a regular fixed income on which he can depend" (p. 118). One of the longest chapters of the book is devoted to "Workers' risks and working conditions" (ch. 10.). Social insurance is given generous space, and it is pointed out that "America, backward in all matters of social insurance, lags behind the rest of the world's industrial nations in old-age pensions also" (p. 127). Seven groups of enumerated government services indicate the expanding function of the state which "has an ever-increasing work to perform" (p. 204).

On the other hand, the business cycle is not discussed; and the inadequate description of our present confused monetary problems leaves one in a state of confusion.

The "disastrous consequences of *laissez faire*" (p. 242) are referred to, and a planned society is held "essential to a system which retains an urban economy and the benefits of the division of labor by large-scale production" (p. 242).

ROCKWELL D. HUNT

SOMBART, W. *Weltanschauung, science and economy.* Translated by PHILIP JOHNSON. (New York: Veritas Press. 1939. Pp. ix, 60. $1.)

This is a translation of the volume *Weltanschauung, Wissenschaft und Wirtschaft* reviewed by Dr. Karl Bode in December, 1938, p. 766.

STIRK, S. D. *German economics reader.* (London: Pitman. 1939. Pp. xii, 121. 5s.)

TAUSSIG, F. W. *Principles of economics.* Vol. II. 4th ed. (New York: Macmillan. 1939. Pp. xvii, 595. $3.)

This volume of the new edition has most of the characteristics of the earlier work. Of the 72 chapters, three are distinctly new and two have been thoroughly rewritten. The three new chapters are "Business profits and corporate management" (50), "Monopoly gains" (51), and "Social security" (61).

In order to keep the classical order in developing the theory of the distribution of wealth the author treats interest, rent, wages and profits together with over-production, over-investment, crises, the business cycle, population, inequality and its causes, and great fortunes. Recognizing the difficulty of obtaining a strictly consecutive and logical outline of so vast a subject, the reviewer sees very little justification for treating the subject of wages in two distinct places in Book V, the distribution of wealth (chapters 41, 42 and 52, 53), and then the wage system in Book VI, "Labor" (chapter 58). Since, however, these volumes were designed for "intelligent and educated" persons and not for elementary students the author's arrangement may be as valuable as any. For the mature student the books are an adequate and effective presentation of the principles of economics.

CURTIS HUGH MORROW

TAUTSCHER, A. *Ernst Ludwig Carl (1682-1743), der Begründer der Volkswirtschaftslehre.* (Jena: Fischer. 1939. Pp. vii, 161. RM. 7.50.)

VLEUGELS, W. *Zur Gegenwartslage der deutschen Volkswirtschaftslehre: eine Sammlung von Aufsätzen über die Gegenwartslage, das Erbe und die heutigen Aufgaben der deutschen volkswirtschaftlichen Theorie.* (Jena: Fischer. 1939. P. xi, 148. RM. 6.)

WINKEL, M. G. *Work-hour value.* (Boston: Meador Pub. Co. 1939. Pp. 268. $2.)

"In this volume the author outlines a new theory of value, the basic idea being that the real *value* in the economic system is not the commodities produced by work, but the *work-hour* itself, and the law of supply and demand should apply directly to work-hours, as it is the value of the work-hour which fluctuates, and not the value of goods. . . . The standard theories of money and prices are reviewed briefly, for the purpose of showing where they have been inadequate to explain present-day phenomena, followed by the presentation of a theory of prices based on work-hour value."

Economic History and Geography

The Economic Bases of Peace. By ERNEST MINOR PATTERSON. (New York: McGraw-Hill. 1939. Pp. 264. $2.50.)

In this sober work, Professor Patterson makes an analysis of the basic forces underlying present economic conflict and an evaluation of the various solutions that have been attempted. Growing world economic interdependence in conjunction with our capitalistic set-up and increasing government intervention in economic affairs have produced a dilemma. We are confronted with conflicting interests, some of which demand freer and international economic relationships while others "are best served by nationalistic action." No program serving the one set of interests to the exclusion of the other is feasible.

There is ample evidence that increasing strains have produced problems which demand a new adjustment. But before such an adjustment is attempted, there must be some agreement as to objectives. The author lists as minimal desiderata the avoidance of military and destructive economic conflict, a general increase in world productivity, greater economic stability, economic and national security, and a less uneven distribution of wealth. But, he warns, no "single form of organization or any one line of conduct will provide an adequate answer." He then attempts an evaluation of each of the main solutions advocated by individuals, groups, and nations, under the headings Capitalism, Autarchy, Internationalism, Intranationalism, Regionalism, and World Economy. Each approach has its contribution to make, but each has also its very definite limitations. Furthermore, no particular adjustment, however satisfactory at the moment, can be more than ephemeral; for that solution in itself produces a situation demanding further readjustment, the chain being apparently endless.

Recent events seem to bear out the pessimism of the author, and to sub-

stantiate his belief that few of us are rational in our mental processes. Perhaps the best indication of his point of view is found in his attitude toward central planning: though it appears to be well-nigh impossible, the situation is such that we may have to do the impossible!

Better organization of material would have prevented repetition and some possible ambiguity. For example, the section on the spread of industrialization, in chapter 10, would have appeared to greater advantage in the previous chapter, while that on intranationalism (chapter 12) might logically have been covered in the chapters entitled autarchy and internationalism. Lastly, in the chapter on internationalism the author deals rather with the limitations of internationalism, though, in the reviewer's opinion, the positive case for the economics of internationalism, in this era of attempted national self-sufficiency, is more important than ever before. But these minor flaws do not detract materially from the work as a whole. As an able analysis of the world's economic dilemma and attempted solutions, it will be invaluable to students of economics.

LORNE T. MORGAN

University of Toronto

The Vampire Economy: Doing Business under Fascism. By GUENTER REIMANN. (New York: Vanguard. 1939. Pp. xvii, 350. $3.00.)

The system of business enterprise depends ultimately on habits that make men look upon private property as peculiarly inviolable and upon its continual accumulation as of prime importance to the community. It is this common-sense attitude that has made modern politics essentially a business-oriented politics, and that has been the final guaranty of the going business system against undue encroachment by non-business interests. However, when a ruling group can entrench itself in sentiments other than the common sense of property and contract—and when, regardless of its avowals, it can wield the coercive powers of the state for its own purposes—then the traditional business order is in peril of its existence. Business-men in Germany and Italy have become aware of this in recent years. Many of them welcomed the movements of Hitler and Mussolini as weapons that would destroy the threat of openly anti-capitalist forces, but they have learned that these weapons are also destructive of their security. Thorstein Veblen, with characteristic farsightedness, once said: "The net outcome of the latter-day return to warlike enterprise is, no doubt, securely to be rated as fostering a reversion to national ideals of servile status and to institutions of a despotic character. . . . Authenticity and sacramental dignity belong neither with the machine technology, nor with modern science, nor with business traffic. . . . Their logical outcome is an abatement of those cultural features that distinguish modern times from what went before, including a decline of business enterprise itself."

Mr. Reimann tells in detail of the political corrosion of private enterprise in Nazi Germany. His wide information and sober realism enable him to throw a revealing light on the forces that rule Germany today, and make his book an important one. Although he has little to say about Fascist Italy, many of his conclusions are an accurate commentary on political and economic processes in that country. Moreover, Mr. Reimann's book has implications for the whole world of capitalist enterprise. And it can be read with genuine profit by those defenders of business institutions who would find their champion in a "strong-arm" government.

Every part of the German business system, Mr. Reimann shows, has been subordinated to the necessities of the higher politics. True, private ownership and direction of the business firm have been formally maintained. But in serving its own interests, the parasitic ruling group has penetrated more and more into the traditionally private realms of enterprise. However, Mr. Reimann believes that on the eve of war (when his book was completed) absolute power had not entirely taken the place of money power. It was smaller business-men, especially shopkeepers, who had been hardest hit by the political circumscription of the market. Big business-men might still make profits and use their money to win favors from the bureaucracy. But they had lost their grip on economic affairs. They could no longer invest their money as they pleased. Instead, they had to sink their surplus funds in taxes and "contributions" or government securities or dubious plant expansions, as commanded by the state. Governmental intervention in the labor, capital, and commodity markets, and the necessity of catering to the officials, raised enormously the costs and anxieties of business administration. Yet business-men were obliged to applaud the policies of the state, not only because they feared even more coercive measures but also because they dreaded that they might lose everything if the dictatorship should collapse. Mr. Reimann concludes: "The system thus is a strange mixture of state interference and planning combined with private management—an economic system which is neither competitive capitalism nor the planned economy of state socialism nor state capitalism. It is so bewildering in its complexity that the capitalist no longer knows whether he is a capitalist or whether he has become a mere agent of the state."

The great extension of state controls in the interests of war economy, the throttling of mass consumption and diversion of private capital into armaments industries, have created tremendous armies and vast quantities of war materials. But they have also resulted in such wearing down of human and material resources, in such widespread mistrust and corruption, in such a general sapping of the community's morale, as to make doubtful the ability of the state "to stand the strain of a real totalitarian war for any length of time." In any event, war will hasten the destruction of private business enterprise. "The totalitarian dictatorship will become more ruthless

in its attitude toward business-men as well as toward the workers and middle classes. The so-called radicals among the party bureaucracy will claim that their program has been fulfilled after the expropriation of most private property holders, while simultaneously the ruin of the middle classes will be completed and the workers will be exploited on an unprecedented scale." Unfortunately, a long war will also produce in other belligerent countries many of the conditions that underlay the rise of German and Italian Fascism.

CARL T. SCHMIDT

Columbia University

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The Economic Recovery of Germany from 1933 to the Incorporation of Austria in March, 1938. By C. W. GUILLEBAUD. (London and New York: Macmillan. 1939. Pp. xiv, 303. $3.25.)

Mr. Guillebaud's economic history of the first five years of the Nazi regime is the story of one of the most exciting economic experiments ever witnessed, *viz.,* the more or less complete change in the economic order of a highly industrialized country. But Mr. Guillebaud does not draw this conclusion from the facts presented. Even the title of the book is an understatement. "Economic recovery" does not characterize the period from 1933 to 1938 in Germany, nor does the book attempt to emphasize the change in the economic order which went far beyond the aims of the original recovery program. Mr. Guillebaud is, of course, conscious of the fundamental differences between the economies of, say, Germany and England. He warns that greatest caution must be observed in applying the experience of Germany to countries with a different type of institutional and economic "background" (p. 233). It seems to me, however, that the main shortcoming of Mr. Guillebaud is due to this very mistake: that he looks at the National Socialist economy with an admiration which rests on a somewhat mistaken comparison of systems which, in fairness to both of them, simply cannot be compared as to single problems and policies (like unemployment) but must be compared in the totality of their economic, general political, and cultural structure.

Chapter 1 gives a description of the historical background from the stabilization of the mark to von Papen's and von Schleicher's recovery programs. Chapters 2 and 3 describe the first and the second Four-Year Plan respectively. Mr. Guillebaud's report is as exhaustive as can be expected in a book that wants to address the general public as well as the professional economist. Mr. Guillebaud is probably right in assuming that the statistical material provided in Germany is as accurate as that of other countries (p. vi). However, he not only uses the statistical material but accepts (because of his desire to be absolutely fair and objective) the official German interpretation of the material, thus giving, by the way, a good

example of the lectures now typical for German universities. (Example: we are made to believe that autarchy, as aimed at under the second Four-Year Plan, will really increase the standard of living (p. 106)).

Too many chronological and factual subdivisions make it difficult for the inexperienced reader to see the main trends of the development; and chapter 4 on "Prices, wages, labour policy, standard of living" does not quite succeed in its attempt to summarize. New facts are presented and the presentation is often again devoid of the necessary criticism. The statement that in 1937 the standard of living of the population as a whole had "about regained the level of 1928" is highly problematic and certainly not sufficiently supported by the statistical material as presented in the book and its analysis. (*Cf.*, the more careful studies by Thomas Balogh, *Economic Journal,* Sept., 1938, or Emil Lederer, *Social Research,* Feb., 1938.) The paragraphs on labor policy are especially one-sided, giving almost exclusively the official German viewpoint without indicating the negative implications of the new regulations.

Chapter 5 on "Some basic features of the National Socialist economic system" tries to show the enormous extent and complexity of state regulation and interference" (p. 218). But instead of discussing the most interesting problems connected with central planning, *i.e.,* with the fundamental change of the economic order in Germany, the author reminds us that German National Socialism is opposed in principle to state management and that nothing is more abhorrent to the Germans than the suggestion that there is any parallel between their system and that of Soviet Russia (p. 220).

It is only fair to remember that the book was concluded in December, 1938. But even by that time it was clear to any student of the problem that the trend was decidedly away from private initiative and enterprise. It is true that many leading personalities in Germany believe that the whole development is due only to exceptional circumstances. But we are not allowed to base our conclusions merely on official utterances, especially when many official statements to the contrary could likewise be quoted. Some theoretical analysis is indispensable and it turns out to be the main weakness of the book that it tries to refrain nearly entirely from theoretical discussions (p. v).

The most interesting chapter from a scientific point of view is the last one (6) on "Germany in full employment." It investigates among other problems the question how far full employment can be maintained under normal conditions. Mr. Guillebaud suggests that "there are strong *prima facie* grounds . . . for believing that Germany's economic well-being today is not vitally bound up with rearmament . . ." (p. 260). Again he does not see, however, that it is in all probability not a question of whether "private investment and demand will take the place of public investment

and demand" (p. 259) because the Nazi government does not want, and cannot afford, to risk the fluctuations of unregimented investment and demand. It is to be expected that the improvement in the standard of living which will be made possible by a decrease in unproductive expenditure will take a collective form rather than that of waiting for private initiative, even if the necessary production programs are carried through by "private" firms.

The few concluding remarks on "*Paragraphengeist*" and "bureaucratism" show clearly how insufficiently the main disadvantages of the German system are analyzed in comparison with the most careful enumeration of its advantages.

Despite all these critical remarks the book is certainly an important publication. Far from being obsolete because of the events in 1939 it will be of great help to those who want to acquaint themselves with the facts about Germany; and it is perhaps especially useful just because the facts are presented somewhat in the light of the National Socialist ideology.

GEORGE N. HALM

Tufts College

The Rise of Modern Industry in Sweden. By G. A. MONTGOMERY. (London: P. S. King. 1939. Pp. viii, 287. 10s. 6d.)

The purpose of this volume is to give an account of the growth of modern economic society in Sweden. The book is divided into five chapters, the first of which deals with the period before the rise of modern industry in Sweden, or roughly to about 1800. The topics covered are agriculture, the iron industry, the timber trade, transportation and commerce, and crafts and "manufactures." In the second chapter, the author discusses later developments in these fields and the problems which arose, such as those pertaining to the growth and well-being of the population, tariffs, banking and foreign trade. The third chapter, entitled "The progress of industrialization, 1870-1914," is devoted to a discussion of the basic economic activities and the growth of the export industries. This period encompassed the building of the railroads, significant strides in banking, the beginnings of social insurance and effective factory legislation, and the growth of labor legislation. In the fourth chapter, the war and post-war period is treated. The fifth chapter is a concisely written summary and analysis of the conclusions drawn. The book also contains an adequate index and a helpful map.

In a brief and illuminating discussion of Sweden's economic growth from 1914 to 1929, the author reiterates some of the conclusions set forth in his earlier work, *How Sweden Overcame the Depression.* The prosperity of the later 1920's is ascribed to "forced national saving." The blockade policy and the submarine warfare of the belligerents reduced consumption within the country. Industrial wages lagged behind costs of living, at least

in the earlier part of this period. "In this way a large export surplus was created. . . . A considerable part of the export and shipping surplus of the war years was devoted to the reduction of pre-war debts abroad, and large amounts of Swedish bonds were repatriated. . . . The final outcome was that Sweden became an exporter of capital." In the early 1920's, however, the country's economic strength was taxed by a process of deflation, which had to be even more drastic in Sweden than in the United States, for example, since "the previous rise in prices had been more extensive in the former country." The deflation crisis caused an increase in the debt burden and seriously affected wage costs.

The industrial expansion of Sweden in the 1920's was more powerful than that of most other European countries. "In subsequent years the difference was even more striking. Whereas industrial production in Sweden in 1937 was about 50 per cent higher than in 1929, the general European figure (exclusive of Russia) rose only about 10 per cent above the 1929 level." Real wages in the manufacturing industries have risen appreciably in recent years, and "the standard of life of the Swedish industrial worker seems now to be on much the same level as that of the British." The increasing scope of social policy and government interference in general has no doubt "deprived the economic life of the country of some of that elasticity and 'self-adjusting' power which was the boast of the liberal era. . . . Industry has been made to carry a heavier burden than before and to acquiesce in the organization of labor and the expansion of social legislation and social service, but for the rest it has been left to manage its own affairs." The character of business competition has, of course, changed from what it was before 1914. In Sweden, as elsewhere, the large concern has become a significant factor in the economic life of the nation, but "in spite of the big concern and the cartel, competition has remained very keen." In contrast to the rather one-sided picture of Swedish economic society, as if it were synonymous with the activities of the Coöperative Union, which has been so widely portrayed in this country in recent years, the author of this volume, who is a Swedish economist, devotes only one paragraph, one-third of a page long, to the consumers' coöperative movement. The share of the consumers' coöperatives in the total retail trade turnover in 1930 was 10.9 per cent, and in 1937 perhaps a little more than 11 per cent.

S. A. ANDERSON

Rensselaer Polytechnic Institute

Prices and Wages in England from the Twelfth to the Nineteenth Century. Vol. I. *Price Tables: Mercantile Era.* By WILLIAM BEVERIDGE, and Others. (London: Longmans Green. 1939. Pp. lx, 756. $12.00.)

The background of this extensive and luxurious set of volumes is the

work of J. E. T. Rogers, whose monumental *Agriculture and Prices in England* is well known. The present work, however, begins earlier, continues later, omits raw material, and has been compiled by a large staff of workers rather than one pair of hands. Whether the present magnificent effort will do more than refine Rogers' averages for the period covered remains to be seen.

After Sir William Beveridge had made a study of medieval wheat prices on the Winchester manors, he was brought into the joint enterprise being launched in America by Professor Edwin F. Gay under the auspices of the Social Science Research Council and with the support of the Rockefeller Foundation. This was an international study of prices in England, France, Germany, Austria, Holland, Spain, and the United States. Hamilton had already begun work on Spanish prices as Beveridge had on English. Although the results of this coöperative study vary in fullness and technical excellence, they have already brought the subject of price history to a higher level.

The work sponsored by Beveridge and largely done by others is scheduled to appear in four volumes. The first deals with the prices of supplies bought by institutions in or not far from London, chiefly during the period 1550-1830. The second will be made up of the prices of farm products during the period 1155-1550. The third, which will be most eagerly awaited by many, is to contain wheat prices, 1155-1937, and also wages. The fourth is apparently to be a catch-all volume of reviews and appendices, decennial tables, tables of prices in silver equivalents, and index.

The present volume, the first, is just a foretaste of what is to come. The prices of wax, straw, paper, hops, coal, meat, spices, cloth, naval stores, and so on, come from schools, hospitals, and supply departments of the government. The many problems of weights, measures, qualities, and freight charges (included in prices) are dealt with; the exposition of difficulties and uncertainties is explicit and satisfying if not disarming. Whether it would not have been sufficient to deposit this part of the material in the form of one typewritten copy in each of four great libraries in the world might be open to debate. As an economic historian, however, I should not like this; for it is just this exposition of difficulties that gets nearest to reality in the whole treatment of the subject.

There are two principal types of actual price material presented. The primary tables include annual averages for an institution or place in terms of shillings and decimal parts thereof. The secondary tables are made up of annual price-relatives which are a percentage of the mean price for the basic period 1720-44. Thus, we note that not only are there few or no actual transactions recorded but there are no index numbers and none are contemplated in any of the four volumes.

The first volume of the four indicates that the work will be of greater value to the statistician than to the economist and of greater value to the economist than to the economic historian. All scholars, however, will applaud the gradual completion of a work which embodies industry, accuracy, and technical competence.

N. S. B. GRAS

Harvard University

Social and Economic History of Germany from William II to Hitler, 1888-1938: A Comparative Study. By W. F. BRUCK. (Cardiff: Univ. of Wales Press. 1938. Pp. xv, 292. 12s. 6d.)

This important book tries to combine the viewpoints of the historian, the sociologist and the economist, following Emil Lederer's statement, quoted as a motto, that "there is no economic history without the use of theoretical conceptions."

It is the leading idea of Professor Bruck's book that "there has been a certain logical sequence in Prussian-German history. In a nutshell, it was and is the expression of cameralism, the peculiar German type of mercantilism" (p. xv). While Great Britain shook off mercantilism in the eighteenth century in a steady development of liberal ideas, Germany's mercantilism developed into state socialism (p. 26). Liberalism (used always in the European meaning) was only of episodic significance in Germany, who was a late-comer in the world market, politically and economically weak, and obliged to economize her limited resources (p. 43). There were only a few laissez-faire economists in Germany, but the influence of Prussian mercantilism and the ideas of Marx were strong (p. 48-49). What there was of a liberalistic-capitalistic nature in the German economic development "was only a reflection of temporary circumstances"; and the theories derived from that period were valid only as long as these circumstances prevailed (p. 74). Large-scale enterprise, cartels, the German banking system and the social reform are discussed as so many evidences for the state-socialist character of the German economy from 1888 to 1914, much in the same way as in the program of *Wirtschaftsdemokratie* which was the last important publication of the Gewerkschaftsbund in 1928. This document and the most interesting discussion following its publication have unfortunately not been used by Professor Bruck.

Germany's war-time economy of 1914-18 and its influence upon the post-war attempts of carrying through a program of socialization is used by Professor Bruck as further proof for the underlying thesis of the book. This thesis does not succeed however, in explaining why "there was in reality very little desire for socialization" (p. 154), in spite of the alleged permanent tendency toward state socialism and in spite of the strong pressure upon the Social Democratic Party to find something that could be

presented as socialism. The complete failure of the state-socialist attempts under the Weimar Reich is certainly not compatible with Professor Bruck's main thesis. Professor Bruck, not able to say anything in defense of his proposition, simply remarks that the Third Reich followed directly the model given by the Weimar Reich (p. 162), which is true only to a very limited degree.

The following discussion of recovery and crisis during the Weimar Reich is weak and not without minor mistakes. In chapter 4 on the Third Reich we find the correct statement that "despite some inconsistencies brought about by the emergency character of the economic system and the transitional state of economic affairs . . . the strong note of a socialist planned economy is evident" (p. 210). But when Professor Bruck points out that "the change from capitalist-entrepreneur . . . to a civil servant of industry marks . . . no new event in German development" (p. 211) we become again doubtful whether the author arrived at his correct conclusion through a real insight in the fundamentally changed character of the German economy under the Nazi regime, or whether he was simply extrapolating his basic trend on the grounds of the thorough regimentation in Nazi Germany.

There is no doubt that much can be said for Professor Bruck's main thesis of the importance of mercantilist ideas in the German development—if it is not overstated. It explains many particulars of the German economy; but it certainly does not prove that state socialism was always the norm and liberalism only a short-lived exception. It is on the contrary true that despite the 1918 revolution there was no important change in the fundamentally capitalist character of the German economy up to the Nazi regime. Professor Bruck does not consider that only the totalitarian economy can dispense with the more or less automatic regulation of the exchange economy through a reasonably free pricing process and that 1933 therefore marks the beginning of a new epoch which is only superficially similar to the period from 1888 to 1932. Professor Bruck's one-sidedness is probably due to a misconception of the capitalist- or exchange economy which he misinterprets as an economy of perfect and pure competition (*cf.* p. 97).

GEORGE N. HALM

Tufts College

NEW BOOKS

BETTELHEIM, C. *La planification soviétique.* (Paris: Rivière. 1939. Pp. ii, 335. 45 fr.)

Dr. Bettelheim spent several months in Russia on a special mission for the French Ministry of Education and studied conscientiously a vast mass of soviet statistics and literature in Russian. He went over to Moscow with a spirit of admiration (*confiance admirative*) and profound hope for the future of the soviet state. He returned considerably disillusioned.

Nevertheless he presents an impartial picture and a profound knowledge of the Russian planning system and technique and what this implies—namely, price policy, wages regulation, foreign trade, etc. He points out many defects in the preparation and in the execution of the plans but is inclined to find an explanation of such defects in the somewhat nebulous "causes": a much too low level of productive forces, the low level of the production technique, social fights and absence of a democracy.

As a seemingly ardent believer in the Marx-Engels idea of a general economic planning, Bettelheim is unable to concede that a compulsory general economic planning eliminating all private initiative is inevitably creating a monstrous Leviathan state.

M. Bettelheim did not see Russia during the NEP period (1921-27) or else he would not make the assertion that it was a complete failure and that the soviet government turned to the five-year plan in a desperate disappointment over the NEP. Just the opposite: the soviet government was frightened by the great success of the laissez-faire policy and began to introduce various restrictive measures on private trading (high discriminative taxes, actual prohibition of trade in agricultural commodities, etc.; see the reviewer's book: *The Economic Policy of Soviet Russia,* p. 68 *ff.*), fearing that the restoration of the bourgeois economy might undermine the faith in the superiority of socialism.

PAUL HAENSEL

BRAILSFORD, H. N. *Democracy for India.* (London: Fabian Society. 1939. Pp. 15.)

CHUAN-HUA, L. *Japan's economic offensive in China.* (London: Allen and Unwin. 1939. Pp. 179. 7s. 6d.)

DAWES, C. G. *Journal as ambassador to Great Britain.* (New York: Macmillan. 1939. Pp. ix, 442. $5.)

DIEHL, K. *Der Einzelne und die Gemeinschaft: Uberblick über die wichtigsten Gesellschaftssysteme vom Altertum bis zur Gegenwart—Individualismus, Kollektivismus, Universalismus.* (Jena: Fischer. 1940. Pp. viii, 346. RM. 16.)

VON GADOLIN, C. A. J. *Die Volkswirtschaft Finnlands und ihre weltwirtschaftlichen Verflechtungen in der Nachkriegszeit.* Kieler Vorträge 60. (Jena: Fischer. 1939. Pp. 24.)

GRAS, N. S. B. and LARSON, H. M. *Casebook in American business history.* (New York: Crofts. 1939. Pp. viii, 765. $5.)

HARPER, L. A. *The English navigation laws: a seventeenth-century experiment in social engineering.* (New York: Columbia Univ. Press. 1939. Pp. xiv, 503. $3.75.)

HEISS, F., editor. *Deutschland und der Korridor.* (Berlin: Volk und Reich Verlag. 1939. Pp. 311.)

HISHIDA, S. *Japan among the great powers: a survey of her international relations.* (New York: Longmans Green. 1940. Pp. xv, 405. $3.50.)

JONES, C. L. *Guatemala: past and present.* (Minneapolis: Univ. of Minnesota Press. 1940. Pp. xii, 420. $5.)

LANDON, C. E. *Industrial geography.* (New York: Prentice-Hall. 1939. Pp. xxviii, 811. $4.)

Industrial geography, the author states, is a division of the field of economic geography and deals especially with the geography of production in extractive, genetic, and manufacturing industries. Commerce and tertiary indus-

tries remotely connected with natural environments receive scant attention. Geographic and cultural determinants are explained for each industry, but descriptive material predominates.

For the United States the industrial-unit basis of treatment is used; for other nations, the country basis. Attention is given to national economic problems and the general dependence of territorial specialization upon interregional and international trade. In the material on the United States, the conservation of resources is given special emphasis. Diagrams and other illustrative material are well balanced with textual discussion.

This volume seems best adapted for college students who are likely to have only one course in the general field of economic geography, though it may also be used for geography or foreign trade majors to follow or precede more technical courses.

ROBERT B. PETTENGILL

LUNT, W. E. *Financial relations of the Papacy with England to 1327.* Pubs. of Mediaeval Acad. no. 33. (Cambridge: Mediaeval Acad. of America. 1939. Pp. xv, 759. $6.)

LYON, L. S., WATKINS, M. W. and ABRAMSON, V. *Government and economic life: development and current issues of American public policy.* Vol. I. (Washington: Brookings Inst. 1939. Pp. xvi, 519. $3.)

MCFERRIN, J. B. *Caldwell and Company: a southern financial empire.* (Chapel Hill: Univ. of North Carolina Press. 1939. Pp. x, 284. $3.50.)

Dr. McFerrin's volume is an extraordinarily competent, blow-by-blow account of the rise and fall of a financial empire. Caldwell and Company—at the height of its success known as the "Morgan of the South"—came into prominence at the end of the war and crashed into an inglorious end in 1930.

In a short but active life, Caldwell and Company became an influential factor in various southern enterprises: insurance, banking, industry and newspapers. It controlled more than a half-billion dollars of assets; as a powerful holding company, it directed other holding and operating companies. The fundamental cause of collapse was dishonesty or, in the author's more euphemistic language, failure to "exercise due restraint in the use of other people's money" (p. 246).

One can hardly quarrel with Dr. McFerrin's suggestion that, in the absence of competition, effective government regulation of investment banks is necessary. What constitutes effective regulation is not indicated and perhaps need not be in an institutional study limited to a single financial house.

HARRY HENIG

MANNICHE, P. *Denmark a social laboratory: independent farmers; co-operative societies; folk high schools; social legislation.* (Copenhagen: Gad. New York: Oxford Univ. Press. 1939. Pp. 215. $1.25.)

MORRIS, R. B., editor. *The era of the American Revolution: studies inscribed to Evarts Boutell Greene.* (New York: Columbia Univ. Press. 1939. Pp. xi, 415. $3.75.)

Contains articles on "The effect of the Navigation acts on the thirteen colonies" by Lawrence A. Harper; "Labor and mercantilism in the revolutionary era" by Richard B. Morris.

MYERS, G. *The ending of hereditary American fortunes.* (New York: Messner. 1939. Pp. 401. $3.50.)

QUARANTA, F. *Ethiopia: an empire in the making.* (London: P. S. King. 1939. Pp. xx, 120. 7s. 6d.)

Treats of agricultural and economic development. A survey of the methods which Italy is using in developing the country.

RAUSHENBUSH, S. *The march of fascism.* (New Haven: Yale Univ. Press. 1939. Pp. 355. $3.)

Mr. Raushenbush's thoughtful book deserves many readers. The details of his story are by now fairly well known, but they are decidedly worth telling again, and telling in the whole. For his aim is something more than to describe the rise of the fascist dictatorships in Europe and their challenge to the traditional world of liberalism. It is to remind us that many of the forces underlying fascism are also at work in America. "Where unemployment is widespread, where millions have little hope of a decent life, where words like 'Liberty' can no longer be connected with a steady job and some sort of future, where the liberal parties have only words and the appeal to history—there is the soil of fascism." Democracy means more than political formulae. If it cannot be brought down to the earth of common men, giving them security and a vital part in the community's affairs, then democratic ideals must lose their mass support. Mr. Raushenbush believes that, fortunately, we still have in America a big reserve of social strength which gives us time to conquer the menacing forces. But the time is not infinite. We must act now to put reality into the avowals of democracy, and we must do it on our home front. The task requires a strong state, but one whose strength is rooted in the people.

CARL T. SCHMIDT

REINHARDT, C. W. *An outline of Roman history: constitutional-economic-social.* (St. Louis: B. Herder. 1939. Pp. 287. $2.)

SATTERLEE, H. L. *J. Pierpont Morgan: an intimate portrait.* (New York: Macmillan. 1939. Pp. 611. $3.75.)

SENIOR, C. *Mexico in transition.* Pamph. ser., vol. vi, no. 9. (New York: League for Industrial Democracy. 1939. Pp. 54. 15c.)

SILBERNER, E. *La guerre dans la pensée économique du XVI^{e} au XVIII^{e} siècle.* Tome VII. (Paris: Recueil Sirey. 1939. Pp. v, 301. 70 fr.)

STARKEY, O. P. *The economic geography of Barbados: a study of the relationships between environmental variations and economic development.* (New York: Columbia Univ. Press. 1939. Pp. xii, 228. $3.)

STEVENS, H. R. *The Ohio Bridge.* (Cincinnati: Ruter Press. 1939. Pp. xiii, 213.)

THOMAS, N. and SEIDMAN, J. *Russia—democracy or dictatorship?* (New York: League for Industrial Democracy. 1939. Pp. 71. 75c.)

WALKER, E. R., assisted by ANDERSON, D. L. *The Tasmanian economy in 1938-39: a survey prepared on behalf of the State Finance Committee.* Stud. of the Tasmanian econ. no. 9. (Hobart: Govt. Printer. 1939. Pp. vii. 47.)

WELLS, R. G. and PERKINS, J. S., compilers. *New England community statistical abstracts: social and economic data for 175 New England cities and towns.* Prepared for the Industrial Development Committee of the New England Council. (Boston: Boston Univ. Bur. of Bus. Res. 1939. Pp. 368. $3.50.)

WHITE, W. A. *The changing West: an economic theory about our golden age.* (New York: Macmillan. 1939. Pp. vii, 144. $1.50.)

The general thesis of Mr. White's book is that "the West became what it was because of a vast increment of wealth from the rising price of the virgin land of the 24 states that were erected beyond our western colonial border in the nineteenth century," and that it is the decline of this increment which has brought much of the farmers' distress. Doubtless most economists would agree that this increment has been a very significant factor in the West, but would insist that the rise and decline of increment was generally a result rather than a cause of underlying economic changes. Mr. White's book is, however, much more than an analysis of the results of the rise and decline of the increment, as he modestly states it. His book is an analysis of the various changes that have come to the agrarian, middle-class West—changes in religious, intellectual, social and political ideals, as well as in economic circumstances. And, finally, it is an analysis of the forces working to undermine our democracy. Covering so wide a field, the author inevitably comes to some conclusions which will be questioned; but the great Emporia editor knows his West as few men know it, and his book is replete with wise and penetrating observations. While he sees the seriousness of the situation that has developed since the World War, he is not hopeless of democracy, but believes that the democratic process "awkward, sluggish, often sadly wasteful, and sometimes corrupt despite our ideals" may find solutions for our problems, because "people in the long run have sense."

J. ISE

WHITTLESEY, D. *The earth and the state: a study of political geography.* (New York: Holt. 1939. Pp. xvii, 618. $3.75.)

ZEITLER, R. and MEWES, B. *Statistisches Jahrbuch deutscher Gemeinden.* 34. Jrg., Lief. 2. (Jena: Fischer. 1940.)

Anuario estadistico, 1938. (Mexico: DAPP. 1939. Pp. xi, 302.)

The business and financial record of World War years. (New York: Seibert. 1939. Pp. 427. $6.)

Economic and industrial survey of New Haven, Connecticut. (New Haven: New Haven Chamber of Commerce. 1939. Pp. 113. $2.)

Among the topics discussed are: population, industrial development, nonemployment, consumer purchasing power, trade, banking, and transportation facilities. In addition to the text are maps, charts and statistical tables.

Fascist era year XVII (28th Oct. 1938-27th Oct. 1939). (Rome: Fascist Confed. of Industrialists. 1939. Pp. 212.)

The northern lakes states region. (Washington: Nat. Resources Committee. 1939. Pp. 35. 10c.)

Statistical abstract of Palestine, 1939. (Jerusalem: Govt. Printer. 1939. Pp. xxi, 181. 4s.)

Statistical year-book of the League of Nations, 1938-39. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. 330. $2.50.)

Contains many new statistical tables relating to mortality by sex and by age groups; to fertility and reproduction rates; to meat production; to rayon and staple fiber production, and to indexes of industrial production.

J. C. ROCCA

The structure of American economy. Part I. *Basic characteristics.* Report prepared by the Industrial Section under the direction of GARDINER C. MEANS. (Washington: Supt. Docs. 1939. Pp. vii, 396. $1.)

World economic survey: eighth year, 1938-39. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. 247. $1.50.)

The eighth issue of this annual survey contains a new and interesting chapter on the economic effects of war rearmament and territorial changes.

J. C. ROCCA

Agriculture, Mining, Forestry, and Fisheries

The Agricultural Industries. By DEAN W. MALOTT and BOYCE F. MARTIN. (New York: McGraw-Hill. 1939. Pp. viii, 483. $4.00.)

The authors, members of the faculty of the Harvard Business School, set out "to present the business aspects of purchasing, processing, financing, and marketing the chief agricultural raw materials entering into American industry and commerce, and to analyze the business problems peculiar to these industries . . ." (p. v). The scope of an "agricultural industry," as they use the phrase, is exceedingly broad. They begin by correctly observing (p. 1) that "much attention has been paid to the problems of the farmers, but seldom has this interest extended to the importance of the handlers and the processors of agricultural commodities and their relation to the products sold." After a brief discussion of the distinctive features of the agricultural processing industries in comparison with other strictly manufacturing industries, they plunge into a detailed discussion of seven principal groups of "agricultural industries." This term then takes on the broader scope of production as well as of processing and distribution.

The reader who is already fairly well acquainted with the production and marketing channels of the main agricultural products will probably feel, with the reviewer, that the authors would have made a far greater contribution if they had confined themselves to a more careful analysis of the narrower field of processing alone, where much certainly yet needs to be done. As it is, a very important part of the book is of necessity merely repetition of materials already adequately covered in some of the better agricultural marketing textbooks, at the expense of a more careful analysis of the processing "bottleneck" in the movement from farm to consumer where concentration of control is most marked.

The seven "industries" covered include the dairy industry, livestock and meat-packing, cotton and cotton textiles, grain, sugar, tobacco, and wool and woolens. All seven sections follow a rather uniform pattern, describing production of the raw material, its assembly, financing, and processing, and the distribution to the consumer of the finished product. Each section also contains a brief discussion of government control and concludes with an all-too-brief appraisal of current problems in the given industry.

The dairy industry is inadequately treated, especially for products other than fluid milk. So broad is the ground covered that very little insight is given into the operating problems of the leading dairy products distributors. The authors, in pressing the point of view that both producers and processors need to recognize their basic identity of interests (*cf.* p. 458), argue none too convincingly (p. 54) that "the majority of successful distributors are those who have the farmers' interest at heart, and are eager to pay as high a price as possible in order to obtain milk which meets with their quality standards." A somewhat more analytical approach might have eliminated such "window dressing."

Similarly, the constancy of the leading packers' purchase percentages in buying livestock is virtually dismissed in a footnote (p. 109; 125), the authors presenting the theoretically naïve argument that "the necessity of using the plant and equipment as much as possible to reduce overhead costs makes it important for the packers to maintain their position in the market; otherwise another packer might secure a competitive advantage by operating at a higher capacity and thus securing lower unit costs." The imperfections in the competitive structure introduced by such oligopoly situations as are common in the agricultural processing industries are not mentioned.

Again, the authors ignore recent economic theory by arguing (p. 354) that "the huge volume of advertising sponsored by the major cigarette manufacturers would seem to indicate that a state of intense competition exists among them. It is surprising, therefore, to hear complaints of monopoly and collusion." Finally, the authors find "overcapacity" in a number of the leading processing industries, but present little or no analysis showing to what extent the price and production policies of the firms in these industries brought this about. While there is nowadays a tendency among economists to see a monopolist behind every tree, the authors seem to be open to criticism because they cannot even see the trees, so broad in scope are their efforts.

WILLIAM H. NICHOLLS

Iowa State College

Agriculture in the Twentieth Century. Essays on Research, Practice and Organization to Be Presented to Sir Daniel Hall. By A. W. ASHBY and Others. (New York: Oxford Univ. Press. 1939. Pp. x, 440. $5.00.)

As stated in its preface, "this volume of essays has been planned to cover the more important developments, scientific, technical, and administrative, during the years in which Sir Daniel Hall has been a leader in the world of British agriculture." The fifteen essays by as many authors cover a wide range of subjects. Among those concerned with economic aspects are "Agri-

culture and the civil service" by H. E. Dale; "Agriculture and the state" by J. A. Venn; "Agricultural conditions and policies, 1910-38" by A. W. Ashby; and "The farmer's business" by C. S. Orwin.

The essay by Mr. Dale is a review of governmental organization devoted to agricultural questions and of recruiting of personnel for such work. Dr. Venn considers briefly governmental policies with respect to agriculture, giving particular attention to the post-war. He brings out some illuminating comparisons between recent programs and those of earlier days. Professor Ashby's appraisal of British agricultural policy since 1910 is of particular interest to anyone concerned with agricultural policy. Those who advocate settlement of unemployed on the land might well note his conclusion with respect to small holdings in England that "until the experience of 1919-26 is forgotten the state is not likely to indulge in any campaign for a rapid increase in their numbers" (p. 67). Another observation which may well be mulled over in this country is that "it will be a sorry day for British agriculture when, in a state retaining its essentially capitalist character, it depends much more upon subsidies (or whatever they may be called) than it does today. Society and the state are not in the habit of paying paupers at rates which do not leave them substantially in the position of paupers in relation to the rest of the community" (p. 85).

Mr. Orwin's discussion draws mainly upon his field of special interest, farm management. It includes an excellent statement of the characteristics of farming as a business. He points out the place of research in the formulation of agricultural policy even though "policy is determined, often, more by political expediency than by economics" (p. 142). He uses research on the size of the farm unit as an illustration and concludes that "a national land policy which is designed to promote closer settlement must be justified by political rather than economic considerations" (p. 145).

Sir E. John Russell, who succeeded Sir Daniel Hall as director at the Rothamsted Experiment Station, in his essay on "Soil science in England" relates how the statistician, R. A. Fisher, became associated with the work of that institution. Under the leadership of his predecessors, extensive data had been assembled from experimentation and observation. These data were found suited to statistical analysis and the task was assigned to Mr. Fisher with results which have modified technical research procedure and attracted the attention of statistical workers generally.

J. A. Hanley in an essay on "Agricultural education in college and county" reviews the development of agricultural education. One interesting point brought out is that a professorship in rural economy was established at Oxford as early as 1796. An essay by Sir John Boyd Orr on "Agriculture and national health" is suggestive of the increasing attention being given to improvements in nutrition as a way of aiding agriculture. Sir R. George Stapledon's essay on "Grassland" deals with a phase of land use

which is receiving much consideration. This and the other essays, however, are concerned more with technical than with economic problems. This book is well worth the time of those who are interested in agricultural development and progress.

O. B. JESNESS

University of Minnesota

NEW BOOKS

ABRAMS, C. *Revolution in land.* (New York: Harper. 1939. Pp. xiv, 320. $3.)

This book offers a contribution to economic theory in dethroning land as the chief claimant in the distribution of wealth as set forth by Ricardo and his followers. Two stimulating chapters discuss the evolution of the economics of land from the Physiocrats to Marx, Henry George and Veblen and end with the observation that as far as land is concerned "the study of economic theory, orthodox and unorthodox, ends in disappointment. . . . Since Henry George there has, in fact, been little serious fundamental theorizing on land economics, though much invaluable work has been done on zoning, housing, conservation, and other practical applications" (p. 188). The author's own version is that with the development of modern industrial economy "land has become the heritage of the underprivileged," nominally owned in small tracts by millions of farmers and urban home owners. The general property tax weighs heavily upon the small land owners, rural and urban, placing a burden upon them all out of line with the ability to pay and forcing over-development and premature land uses.

The submergence of the farm under a dual price system—"monopolized" industrial prices and prices arrived at under fierce competition of farmers—is traced. The uneven distribution of wealth is held to be primarily responsible for rural tenancy and the mortgage encumbrance of farms and urban homes is given a prominent place. The 25 billion dollars of mortgages held by institutional lenders give unusual economic power to these mortgage holders (p. 113).

A chapter is devoted to the New Deal agencies concerned with land in which the author examines the constantly growing financial investments of the federal government in land. Up to March, 1939, the federal government had spent 6.4 billion dollars for "land relief" through the various alphabet agencies from H.O.L.C. to A.A.A. and "still the land lies prostrate" (p. 264). His solution consists of a number of suggestions for improvement of taxation, mortgage reform and better appraisals for immediate action but the ultimate solution is land nationalization with the part left for private ownership not well defined. The reason for this drastic step is not to curb speculation (which he considers of minor importance) or the taking of economic rent for public purposes but because "socialization of profits has given way to socialization of losses" (p. 284). He also suggests greater social control over land, more planning, accompanied by the expansion of the powers of the federal government, including land taxation, but with no undue and unbalanced concentration of power in Washington.

GEORGE S. WEHRWEIN

ASTOR, W. A. and ROUNTREE, B. S. *British agriculture: the principles of future policy.* New ed. Pelican spec. (New York: Penguin Books. 1939. Pp. 284. 25c.)

BAKER, O. E., BORSODI, R. and WILSON, M. L. *Agriculture in modern life.* (New York: Harper. 1939. Pp. vii, 303. $3.50.)

The authors writing independent essays have presented here their views on the ailments of rural life in our modern world. Each view is to a large degree unique, but has been expressed frequently enough elsewhere to be associated with the author. This should be sufficient warning that they do not meet ready acceptance by many agricultural economists.

Mr. Baker presents the longest of the essays. He is a Malthusian in reverse, and is genuinely alarmed over the declining rate of population growth, the various phases of which he demonstrates with an imposing array of data. The city and its way of life is by implication chiefly at fault. The cities fail to maintain their population from their own stock and attract a constant stream of rural youth whose cost of rearing is borne by the country. Moreover, this process accelerates a transfer of land and agricultural wealth into absentee city landlord's hands and increases tenancy in the country. Mr. Baker appears to believe that the higher reproductive rate in the country is indicative of more sound fundamental values in that life than in city life. He is sure that ways must be found to maintain more of our population in rural life, even at the expense of smaller farms, if we are to prosper or even to avoid political and social disaster.

Mr. Borsodi believes that the difficulty with agriculture is that we have tried to make a business enterprise out of what is essentially a way of life. His solution for the farmer would be to think less about making money and selling in the market and to produce more goods for home consumption and do more things for himself. We need in short to build up a more self-sufficing type of agriculture. Mr. Borsodi rightly points out that a large share of agriculture has never been other than of this type, but he would have difficulty in demonstrating that this is the best and most satisfying part of farm life. It is more probable that many of these self-sufficing farmers look with envy at their more commercial neighbors and would emulate them if possible.

Mr. Wilson brings to his discussion a background of vigorous farm work in early years on an Iowa farm and a long period of active extension work with farmers in Montana. His memory is too vivid to swallow the proposals of a return to the good old days of self-sufficiency. He recognizes advantages in electric lights, automobiles, radios and telephones and contrasts the present life on many farms with the lack of physical comforts and exhausting toil of the old days. He would maintain that we cannot turn back but must adapt what is good of the new to the enduring values of the old. In the closing chapter he outlines his own philosophy which has come to underlie much of the New Deal agricultural program.

WARREN C. WAITE

BENNETT, M. K. *Wheat and war, 1914-18 and now.* Wheat studies, vol. xvi, no. 3. (Stanford University, Calif.: Food Research Inst. 1939. Pp. 67-112. $1.)

DAVIS, J. S. *The world wheat situation, 1938-39: a review of the crop year.* Wheat studies, vol. xvi, no. 4. (Stanford University, Calif.: Food Research Inst. 1939. Pp. 113-203. $1.25.)

EDWARDS, E. E. *A guide for courses in the history of American agriculture.* Bibliog. contrib. no. 35. (Washington: U. S. Dept. of Agric. Library. 1939. Pp. viii, 192.)

FARNSWORTH, H C. *"World" wheat stocks 1890-1914 and 1922-39.* Wheat studies, vol. xvi, no. 2. (Stanford University, Calif.: Food Research Inst. 1939. Pp. 39-66. 75c.)

GORHAM, H. M. *My memories of the Comstock.* (Los Angeles: Sutton House. 1939. Pp. 222. $2.50.)

The significance of the Comstock Lode in American mining history is unique. Some few titles have appeared on the subject in the last five years. Mr. Gorham's small but informative volume contains much for the student interested in the later period of the Lode's development. Residing in Virginia City and being in intimate association with all important personalities, the author has tabulated many important incidents not to be found elsewhere.

CECIL G. TILTON

HENDERSON, H. D. *Colonies and raw materials.* Pamph. on world affairs no. 7. (New York: Farrar and Rinehart. 1939. Pp. 31. 15c.)

HOTCHKISS, W. E., and others. *Mechanization, employment, and output per man in bituminous-coal mining.* Vols. I and II. Rep. no. E-9. (Philadelphia: WPA, Nat. Res. Project. 1939. Pp. xxx, 175; 176-436.)

HUBBARD, L. E. *The economics of soviet agriculture.* (London and New York: Macmillan. 1939. Pp. xii, 316. $4.)

JONES, J. H., CARTWRIGHT, G. and GUENAULT, P. H. *The coal-mining industry.* (London: Pitman. 1939. Pp. vii, 382. 16s.)

KINGSTON, J. *A lei estatística da demanda do café.* (Rio de Janeiro: Serviço de Publicidade Agricola. 1939. Pp. 75.)

LEÃO, J. *Mines and minerals in Brazil.* (Rio de Janeiro: Centro de Estudos Economicos. Pp. 243. $1.)

LIVELY, C. E. and TAEUBER, C. *Rural migration in the United States.* Res. monog. xix. (Washington: Supt. Docs. 1939. Pp. xxi, 192.)

MCPHEE, D. G. *A business approach to farm surpluses.* (Washington: Nat. Assoc. of Food Chains. 1939. Pp. 80. Gratis.)

MYERS, W. M. *Problems and trends in the mineral industries of Pennsylvania.* Exp. Sta. bull. 27. (State College, Pa.: Pennsylvania State Coll. School of Mineral Ind. 1939. Pp. 91. 50c.)

PARERA, M. F. and PALAU, A. *Diferenciación de las variedades de trigo por sus características de gluma y grano.* Pub. no. 42. (Buenos Aires: Comisión Nacional de Granos y Elevadores. 1939. Pp. 198.)

ROUSH, G. A. *Mineral industry, 1938.* Vol. 47. (New York: McGraw-Hill. 1939. Pp. 783. $12.)

SCHILLETTER, J. C., ELWOOD, R. B. and KNOWLTON, H. E. *Changes in technology and labor requirements in crop production: vegetables.* Rep. no. A-12. (Philadelphia: WPA, Nat. Res. Project. 1939. Pp. xiv, 131.)

SHOLLENBERGER, J. H. and CASTIGLIONI, J. M. *Estudio sobre el trigo molido por molinos argentinos en el año agricola 1937-38.* Pub. no. 40. (Buenos Aires: Comisión Nacional de Granos y Elevadores. 1939. Pp. 100.)

VANDERCOOK, J. W. *King Cane: the story of sugar in Hawaii.* (New York: Harper. 1939. Pp. xii, 192. $2.50.)

VREELAND, F. M. and FITZGERALD, E. J. *Farm-city migration and industry's labor reserve.* Rep. no. L-7. (Philadelphia: WPA, Nat. Res. Project. 1939. Pp. xii, 67.)

WARNER, C. A. *Texas oil and gas since 1543.* (Houston: Gulf Pub. Co. 1939. Pp. 494. $5.)

Agricultural statistics, 1939. (Washington: Supt. Docs. 1939. Pp. 597. 60c.)
Agriculture in the twentieth century: essays on research, practice, and organization to be presented to Sir Daniel Hall. (New York: Oxford. 1939. Pp. 450. $5.)
Combines Investigation act: investigation into an alleged combine of wholesalers and shippers of fruits and vegetables in western Canada. Rep. of Commissioner, Oct. 31, 1939. (Ottawa: Dept. of Labour. 1939. Pp. 91. 25c.)
Cost of living in the coöperative villages. (Tel-Aviv: Audit Union of the Agric. Coöp. Soc. 1939. Pp. 15.)
Documentation for the European conference on rural life, 1939. (Rome: Internat. Inst. of Agric. 1939. Pp. 370. L.25.)
Economic power: hearings, 76th Congress, 1st session, authorizing and directing a select committee to make a full and complete study and investigation with respect to the concentration of economic power in, and financial control over, production and distribution of goods and services. Part 7. *Milk industry, poultry industry.* (Washington: Supt. Docs. 1939. Pp. 2751-3282. 75c.)
Grain trade year book, 1938-39. (Winnipeg: Sanford Evans Stat. Serv. 1939. $1.50.)
Memoria correspondiente al año 1938. (Buenos Aires: Junta Reguladora de Vinos. 1939. Pp. 192.)
Our energy resources. (Washington: Nat. Resources Committee. 1939. Pp. 42. 10c.)
Report of the Secretary of Agriculture, 1939. (Washington: Supt. Docs. 1939. Pp. iv, 169.)
La standardización del trigo en Australia. Pub. no. 43. (Buenos Aires: Comisión Nacional de Granos y Elevadores. 1939. Pp. 96.)
A survey of research in forest land ownership. Report of Special Committee on Research in Forest Economics. (New York: Social Sci. Res. Council. 1939. Pp. 93. 60c.)

Manufacturing Industries

NEW BOOKS

CHUTE, A. H. *Marketing burned-clay products, including an analysis of location, importance and development of the industry.* (Columbus: Ohio State Univ. 1939. Pp. xx, 374.)

LYNSKY, M. *Supplement: sugar economics, statistics, and documents.* (New York: U. S. Cane Sugar Refiners' Assoc. 1939. Pp. xiv, 206-426. $1.)

The original volume was noted in the *Review* of June, 1939 (p. 573). The *Supplement* contains additional data, bringing the subject matter up to date. It includes statistical tables, reproduction of documents, and appendices.

MCNEILL, C. E. and JONES, H. F. *Nebraska's electric power development in relation to municipal service.* Nebraska stud. in bus. no. 44. (Lincoln: Univ. of Nebraska Coll. of Bus. Admin. 1939. Pp. 88.)

ROBINSON, H. W. *The economics of building.* (London: P. S. King. 1939. Pp. xii, 162. 10s. 6d.)

After a convenient description of the organization of the building industry, the author constructs a theoretical schema, first under stationary and then under dynamic conditions. Population movements are considered in their vari-

ous aspects followed by an investigation into the effects of the different types of demand for and supply of houses. Rents are determined by the interplay of the demand and supply schedules for occupation; house prices, however, are affected only by demand for ownership.

WOLFGANG F. STOLPER

Earnings and hours in the meat-packing industry, 1937. (Washington: Supt. Docs. 1939. Pp. 31.)
The leather industry of the United States. (Washington: Supt. Docs. 1939. Pp. 12. 5c.)
Price research in the steel and petroleum industries. Prepared for the Conf. on Price Res. Price stud. no. 3. (New York: Nat. Bur. of Econ. Res. 1939. Pp. xiii, 170. $2.)
Textile markets: their structure in relation to price research. Rep. of Committee on Textile Price Res. to the Conf. on Price Res. Price stud. no. 2. (New York: Nat. Bur. of Econ. Res. 1939. Pp. xx, 266. $3.)

Transportation and Communication

NEW BOOKS

DUNCAN, C. S. *The answer to highway propaganda.* (Washington: Assoc. of Am. Railroads. 1939. Pp. 20. Gratis.)
GORMLEY, M. J. *Railway capacity and traffic control.* (Washington: Assoc. of Am. Railroads. 1939. Pp. 63.)
PARMELEE, J. H. *The modern railway.* (New York: Longmans Green. 1940. Pp. xiv, 730. $4.)
RANKIN, E. R., compiler. *Government ownership and operation of the railroads: debate handbook.* Ext. bull., vol. 19, no. 2. (Chapel Hill: Univ. of North Carolina Press. 1939. Pp. 110. 50c.)
SUMMERS, F. P. *The Baltimore & Ohio in the Civil War.* (New York: Putnam. 1939. Pp. 304. $3.)
SUMMERS, H. B. and SUMMERS, R. E., compilers. *The railroads: government ownership in practice.* (New York: Wilson. 1940. Pp. 139.)
Investigation of railroads, holding companies, and affiliated companies. Parts 20-21. (Washington: Supt. Docs. 1939. Pp. xxi, 8569-9064a, xxiii; xxxiv, 9065-9552, xxviii.)
A yearbook of railroad information. 1939 ed. (New York: Committee on Public Rel. of the Eastern Railroads. 1939. Pp. 96.)

Trade, Commerce, and Commercial Crises

Turning Points in Business Cycles. By LEONARD P. AYRES. (New York: Macmillan. 1939. Pp. xiii, 214. $2.75.)

In this book Colonel Ayres makes contributions of a statistical as well as an economic character. The statistical contribution consists of two new series displaying listings of American corporate securities. No compilation on this subject has hitherto been available with respect to the period before 1906; the new series in this book carries our information back to 1863.

The new data on security issues cover only listings on the New York Stock Exchange. Data for the years 1863-1881 cover only bonds; but, starting with 1882, listings of corporate stocks are also presented. Separation of refunding issues from those for new capital proved to be impossible; but the securities issued for property were eliminated. Securities issued by financial corporations, by governments and by foreign obligors were also eliminated. The purpose of the new series is to measure the flow of investment money into American corporations. Monthly totals of actual sales prices, rather than par values, are reported (Appendix A).

The economic contribution made by this volume is to describe one line of causation of cyclical fluctuations, and to demonstrate the importance of the causes thus described. To explain the theory which Colonel Ayres thus presents, it is convenient to divide our business history into two parts: the period prior to the federal reserve system and the period since 1913.

In both periods the volume of business has been controlled chiefly by the flow of new money derived from the issue of securities. The controlling factor is the total volume of new issues, not the amount of debt created (p. 127). Business follows total new issues with a normal lag of 4 to 6 months (p. 67).

Securities are issued by governments as well as by business. Business corporations cannot readily be financed when the security markets are falling (p. 162). Stock prices normally follow bond prices, (p. 65). The volume of security issues follows both with characteristic lags.

Short-term interest rates have but little direct effect on the volume of business (pp. 116-118); but rates of bank interest exert great indirect effect through the prices of securities. Peak prices of bonds tend to occur about 6 months after the low point in commercial interest rates, and the lowest level of bond prices occurs normally about 3 months after commercial interest rates have reached their peak.

Before the establishment of reserve banks, the rates of commercial interest were a function of the reserve ratios of banks. Reserve ratios are affected by variations of deposits as well as by variations in the amount of cash held by banks; but the latter element is more significant. The record of the years 1831-1914 reveals therefore a pattern of business cycles remarkably uniform. It was a period in which the length of business cycles was controlled substantially by the speed with which cash flowed out of banks in response to business expansion and back into the banks as business contracted.

Developments in Europe and government activity here played a subordinate rôle in business cycles before 1914. Since that date only one cycle, that from 1921 to 1924, has followed the normal pattern (p. 147). Elasticity of credit under the federal reserve system permitted capital issues to expand continuously from 1923 to 1929. Since 1933 the volume of

business has been simply a function of the preceding volume of federal debt creation (p. 150).

The central thesis of this work and its method may both be revealed by one quotation (p. 169). "In the entire long period up to 1933 there is no instance in which the flow of new funds from security issues shows an important decline without that development being followed by a downturn of business activity, nor is there any instance of the issues showing an important advance that was not promptly accompanied and followed by business recovery and prosperity."

DONALD S. TUCKER

Massachusetts Institute of Technology

The Canadian Balance of International Payments: A Study of Methods and Results. (Ottawa: Dominion Bur. of Statistics. 1939. Pp. 251. $1.00.)

This significant publication is a detailed analysis of Canada's balance of payments, and is a welcome companion to the study of the United States balance of payments published annually by the Bureau of Foreign and Domestic Commerce. The volume represents several years' effort, and was prepared by Herbert Marshall, chief of the Internal Trade Branch of the Bureau of Statistics, with the assistance of C. D. Blyth. It covers Canada's foreign transactions for the years 1926 through 1937, and endeavors to build up factual data to replace the estimates on which the earlier statements of Canada's balance of payments were based.

The first 172 pages consist of textual discussion, while pages 173 to 245 contain statistical tables. The study has three main divisions. Chapters 3 to 7 deal with international indebtedness, that is, Canadian investments abroad and foreign investments in Canada. The next seven chapters deal with current accounts, "debits and credits arising through international transactions in goods and services for the calendar year." The following six chapters deal with current capital account, analyzing the year's capital movements inward and outward.

The difficulties of evaluating foreign investments in Canada were settled in favor of utilizing the "capital employed" figures compiled annually by the Census of Industry, which approximate book values. The figures "attempt to show the amount which could be paid to outsiders if all government bonds were paid off at par and if corporations could all be liquidated at the present worth as shown by the Census of Industry's capital employed figures." Since these figures reflect internal economic fluctuations and the plowing back of earnings they "cannot be used as a basis for ascertaining the inflow and outflow each year of investments in Canadian industry by outsiders." For capital inflow and outflow a separate inquiry was made.

The authors argue against market values as being subject to erratic fluctuations. "The problem is to put the most reasonable valuation on the totality of international indebtedness." In discarding market values they attempt to improve upon this type of valuation. Statistical difficulties may militate against compiling figures of market values, but on theoretical grounds the use of any other value is open to challenge. If the capital in question is to be withdrawn, the market value is the significant amount. It is the value which tends to exclude errors of judgment of entrepreneurs and which allows for changes in the rate of capitalization.

The final balance sheets show that Canada regularly has had a net deficit in her goods and services trade with the United States, with the exception of the year 1935 when a slight credit was registered. With the entire world, however, Canada has since 1933 had a net surplus in her goods and services trade. A net inflow of capital from the United States took place from 1927 through 1932; since that year a net outflow to the United States has regularly taken place. Capital movements with the entire world during these years were somewhat similar to those with the United States.

At the end of 1937, out of total foreign investments in Canada of $6,765,000,000 the United States had $3,932,000,000 and Great Britain $2,685,000,000. The largest item in Britain's investments there was railways; the largest item of American investments was government and municipal bonds. Canada's investments abroad totaled $1,758,000,000, making the country a net debtor.

Canada is to be congratulated upon this careful statistical analysis of the country's balance of international payments. It would be well if other leading countries would follow her excellent example.

JOHN PARKE YOUNG

Occidental College

NEW BOOKS

BAUDIN, L. *Free trade and peace.* (Paris: Internat. Inst. of Intellectual Cöop. New York: Columbia Univ. Press. 1939. Pp. 87. 75c.)

BIDWELL, P. W. *The invisible tariff: a study of the control of imports into the United States.* Prepared under the auspices of the Am. Coörd. Committee for Internat. Stud. (New York: Council on Foreign Relations. 1939. Pp. ix, 286. $2.50.)

This book presents a painstaking, comprehensive study of the various devices which in addition to the tariff have been used in order to make it difficult and at times impossible for foreign goods to enter this country.

In the first part of the volume Professor Bidwell takes up customs regulations and formalities, measures adopted for the prevention of unfair competition, countervailing and anti-dumping duties, "flexible" provisions of our postwar tariffs, import quotas and our Trade Agreements Program; the second part

of the book deals with measures which have been passed in order to protect public health and morals, to insure public safety and to prevent the importation of diseased plants, animals and animal products. As the author points out, the ever growing extension of the non-tariff control measures over imports has been in many instances a necessary corollary of increasing regulation of domestic trade both by the states and by the federal government. While ostensibly many of these measures are of a police character or invoke sanitary considerations, in reality they have been used as instruments of economic protection, doing it more effectively than it can be accomplished by means of customs duties.

The reviewer appreciates Professor Bidwell's point of view, but he does not share his alarm concerning the growing power of the executive to deal with foreign-trade problems, which, according to the author, is inconsistent with our democratic form of government; he sees the danger in using economic sanctions against "the aggressive and seemingly (?) lawless policies of the so-called (?) dictator states" (p. 19; the question marks are the reviewer's), because their use may lead to war. But according to Mr. Bidwell, to meet the conditions created by totalitarian states "economic sanctions by congressional action would be difficult, probably impossible"; thus he is apparently in favor of doing nothing because the doing may have political implications.

While objections to some of the "invisible" tariff measures so well described by Professor Bidwell may be justified and while it is true that lobbying, logrolling and other undesirable practices have characterized the enactment of our tariffs, one may question the correctness of the author's opinion that the delegation of the tariff-making authority to the executive in the "flexible" provisions of the acts of 1922 and 1930 and in the Trade Agreements Program inaugurated in 1934 may be regarded as manifestations of the inability and unwillingness of the Congress to deal with tariff problems honestly and effectively (p. 12). Whatever may have been the origin of the piling up of trade barriers by various countries after the World War, these barriers exist and in dealing with them one cannot rely upon the slow and cumbersome process of tariff revisions; it was partly the realization of this fact that led to the giving of greater foreign-trade regulatory power to the administrative branch of our government.

The book is largely expository and its chief value is that for the first time it brings together the impressive array of legislative and administrative non-tariff control measures which have been restricting the import trade of the United States, particularly in recent years.

SIMON LITMAN

BINDER, P. *Die Schalthebel der Konjunktur: Kaufkrafteinsatz und Kaufkraftstillegung als Bestimmungsgründe des Volkseinkommens.* (Munich: Oldenbourg. 1939. Pp. 106. RM. 4.80.)

The present work contains essentially the first part of a shortly appearing volume on the control of the business cycle. It confines itself strictly to the essentials of the mechanism of the economic cycle, leaving untouched the psychological and material forces which set it into and which maintain it in motion. The influence of Keynes's *The General Theory of Unemployment, Interest and Money,* appearing after the first sketch of the main conclusions had been made, compelled the author to give his ideas a theoretically more

pointed, as well as a more practical politico-economic formulation, particularly since from the beginning an accounting point of view is applied in order to bring involved processes to a form of presentation that may be seen at a glance. The author confines himself to the exclusive aim of ascertaining exactly the mechanical relationships between the magnitude of the reservoir of buying power for purposes of investment and consumption and the value magnitude of national income. The real causes and the issue of economic expansion and depression are not dealt with. Main consideration is given to deposits and abatement of buying power as motives of national income.

HERMAN HAUSHEER

DONNELLY, G. R. *World trade in dental and surgical goods.* Trade prom. ser. no. 204. (Washington: Supt. Docs. 1939. Pp. v, 264. 25c.)

GEISER, A. *Die Kompensation als Mittel der Aussenhandelspolitik unter besonderer Berücksichtigung der Schweiz.* (Zürich: Schulthess. 1939. Pp. 109.)

HANTOS, E. *Le régionalisme économique en Europe.* (Paris: Inst. Internat. de Coöp. Intellectuelle. 1939. Pp. 59.)

The central thesis of this study is that international economic agreements on regional bases are tending to replace the short-lived autarchical systems which followed the collapse of free international trade in the post-war era.

Since the policy of free trade, within Europe of the recent past, to say nothing of the present, is virtually unthinkable, Professor Hantos holds that limited international agreements regarding tariff concessions, administrative uniformities, regional preferences, etc., provide at least a modicum of relief to a world restrained by national strait-jackets. Granting that such international agreements are not overwhelmingly important, Professor Hantos sees the coördination and expansion of these agreements as a difficult but altogether worthy task.

The Danubian agreement of 1930, the agreement of the "Little Entente" of 1933, the Balkan agreement of 1933, the Pact of Rome of 1932, the Oslo conventions of 1930 and 1937, and the Baltic Coöperative agreements are briefly discussed.

The most important conclusions drawn by the author from his analysis are (1) that regional agreements, by themselves, are not likely to secure all the benefits of true free trade, (2) that the purpose of regional agreements on an international scale is the protection of the several national economies against decline through mutual preferential treatment, (3) that agreements have been most successful when the signatory countries have harmonious political and economic aims.

SIDNEY C. SUFRIN

HEUSER, H. *Control of international trade.* (Philadelphia: Blakiston's. 1939. Pp. x, 282. $3.50.)

It is the purpose of this book to present a comprehensive analysis of import quotas and foreign-exchange control which are much-needed subjects of economic inquiry. In compliance with the terms of the Acland Scholarship the field of research has been restricted to Europe—an unfortunate limitation in view of the wide use of these devices elsewhere. The writer has undertaken to analyze the causes of regulation of foreign trade; the methods of foreign trade control; and the results of the regulation of foreign trade. In parts 1 and 2, there is a detailed consideration of the technical aspects and administrative

problems. A particularly interesting section deals with the development of the use of import quotas as bargaining instruments of commercial policy. Part 3 consists of a theoretical analysis of the effects on trade, prices and production, illustrated with diagrams and tables. Throughout these later chapters there is a comparison with the use of tariffs for similar purposes. The application is limited to a "democratic country in which private enterprise is the predominating form of economic activity." In his conclusions Dr. Heuser builds up a strong theoretical case against import quotas and foreign exchange control in such an economy. Whereas, under certain conditions, these two trade controls are admittedly more effective, tariffs he considers preferable from the point of view of social justice.

No fault can be found with the author's theoretical deductions which are similar to the earlier analyses of the tariff by the neo-classicists. They will not, however, discourage governments concerned with economic planning or increased control over economic activities. For countries striving to preserve the competitive system the question remains unanswered—namely, will these new techniques used by other nations require radical changes in customary instruments of commercial policy?

ETHEL B. DIETRICH

MELDER, F. E. *State trade walls.* Public affairs pamph. no. 37. (New York: Public Affairs Committee. 1939. Pp. 31. 10c.)

PIETZSCH, A. *Zur Frage der Ordnung der weltwirtschaftlichen Beziehungen.* Kieler Vorträge 61. (Jena: Fischer. 1939. Pp. 19.)

This reprinted lecture is a survey of international trade relations from an authoritarian, anti-liberalistic point of view. It consists chiefly in an analysis of two comprehensive tables of figures concerning the trade balances of 11 countries and groups of countries, the figures being the results of studies made in a department of the Reichswirtschaftskammer specially organized for this purpose by the author. The first table shows the trade balances itemized as Goods, Interest, and Services for the years 1929, 1933, 1935, and 1937. One of the main conclusions derived from these figures is that the economy of the United States is a disturbing factor in the world because of the high positive trade balance in goods which it maintains notwithstanding its rôle as a principal creditor country. The second table shows the trade balances between any two of the 11 countries for 1937. It gives a vivid picture of the many-cornered character of international trade, and of the necessity for certain trade partners to maintain permanently non-balancing, that is only indirectly balancing, trade relations. As regards barter agreements, this situation is interpreted as pointing to the need for multilateral rather than mere bilateral agreements of this kind.

Although convinced that world economy, like national economy, needs centralized planning, the author is not optimistic as to the likelihood of international coöperation in the interest of a more rational and equitable order in the near future. (The lecture was delivered on July 12, 1939!) He hints that in the meantime certain countries may find it necessary to solve their trade problems independently by expansion of the economic units under their control.

JOHN V. SPIELMANS

SMITH, E. L. *Tides in the affairs of men: an approach to the appraisal of economic change.* (New York: Macmillan. 1939. Pp. x, 178. $2.)

TASCA, H. J. *World trading systems: a study of American and British commercial policies.* (Paris: Internat. Inst. of Intellectual Coöp. New York: Columbia Univ. Press. 1939. Pp. 172. $1.50.)

TINBERGEN, J. *Business cycles in the United States of America, 1919-1932.* II. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. 244. $1.25.)

Commerce and economic resources of our outlying territories and possessions: Territory of Alaska; Territory of Hawaii; The Philippines; Puerto Rico; Virgin Islands; Panama Canal Zone; other possessions. Rev. ed. (Washington: Chamber of Commerce of U. S. 1939. Pp. 50.)

International trade in certain raw materials and foodstuffs by countries of origin and consumption, 1938. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. 178. $1.50.)

Reciprocal trade, agreement, protocol, notes, and protocol of amendment, between the United States of America and Czechoslovakia: and proclamation of Mar. 23, 1939, by the President of the United States terminating on April 22, 1939, his proclamations of Mar. 15, 1938, and Apr. 15, 1938. Exec. agreement ser. 147. (Washington: State Dept. 1939. Pp. 62. 10c.)

Reciprocal trade, agreement and protocol of signature between the United States of America and France; and related notes. Exec. agreement ser. 146. (Washington: State Dept. 1939. Pp. 68. 10c.)

Review of world trade, 1938. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp 85. 60c.)

In the present issue has been added a section dealing with the relationship between the prices and the quantities of goods entering into trade.

J. C. ROCCA

Accounting, Business Methods, Investments and the Exchanges

Does Distribution Cost Too Much? A Review of the Costs Involved in Current Marketing Methods and a Program for Improvement. By PAUL W. STEWART and J. FREDERICK DEWHURST, with the assistance of LOUISE FIELD. (New York: Twentieth Century Fund. 1939. Pp. xvii, 403. $3.50.)

Objectives of this study are to present "an accurate over-all picture and appraisal of the distribution system as a whole and a program for making it more efficient." The report covers only distribution of movable, tangible commodities, and omits transactions in real estate, insurance, amusement businesses and the like. The research study is presented in ten chapters; the conclusions and program, in a final chapter.

In 1929, distribution costs are estimated to have accounted for 59 cents of the consumer's dollar spent for commodities as contrasted with 41 cents for production costs. Of this distribution cost, retailing represents about one-third, manufacturers' distribution about a fourth, transportation about a fourth, and intermediary trade approximately a fifth. The small remainder consists of national advertising, costs of natural gas distribution and interest costs on installment loans.

The weakest point in this estimate, as is freely admitted by the authors, is manufacturers' distribution costs. Lack of data forced major reliance upon a study of a limited number of manufacturers whose average costs were projected to census data. There are questions not only as to the reliability of the small samples but also as to the meaningfulness of average figures for manufacturers who often vary widely in their distribution policies. Also, inasmuch as census data are used heavily in measuring and comparing retailing and wholesaling costs, somewhat more detailed consideration of their uses and limitations would have been helpful. The level of census costs at times tends to be lower than that shown by carefully conducted sample studies.

Generally speaking, however, the research studies in costs were competently and conscientiously handled and represent a real contribution. The blame for gaps in data rests upon the marketing profession for not producing more monographs upon which the authors could have drawn. The text is clear and visual presentations aid the reader. The flow chart developed in conjunction with chapter 3 is helpful, especially in illustrating the recirculation present in commodity movements, while the chapter on government regulation of distribution is an excellent summary.

The Committee concludes rather cautiously that distribution does cost too much, but points out that there is no way of measuring how much too costly it is or even of saying that it is more costly than production. The factors causing high distribution costs are enumerated as costs of competition, consumer demands for service and consumer ignorance in buying, and inefficiency in operation.

The program for reducing costs of distribution has and will continue to provoke lively discussion. Although space forbids consideration of the 19 recommendations, it may be said that those related to better marketing information and more efficient operation are least controversial. Those dealing with competitive restrictions and regulations will have a mixed reception and probably will be bitterly opposed by various groups seeking to perpetuate their economic existence through favoring legislation. Also controversial are the recommendations having to do with consumer knowledge, although the arguments here are more likely to be concerned with the practicability of certain items. For example, it seems questionable in the light of past experience whether an increase in government pamphlets will materially improve consumer buying. Neither does it seem that more merchandise testing is the answer. This field is full of thorny problems not the least of which is the many uses to which the same product may be put by different consumers. Differentiated retail pricing is likely to draw fire from retailers who have tried it; but it should be borne in mind that this particular recommendation urges careful study rather than widespread adop-

tion. The possible savings through further organization of consumer coöperatives may be questioned although no one will doubt their educational value to members and their occasional utility as a competitive force. Even with active sponsorship by government and other organizations, consumers coöperatives account for less than one per cent of retail sales.

It is perhaps well that the program is of controversial nature. Were it such as to be readily accepted, interest would quickly die. In this way there is much more hope of constructive action.

ROSS M. CUNNINGHAM

Massachusetts Institute of Technology

NEW BOOKS

ALFORD, L. P. *Principles of industrial management for engineers.* (New York: Ronald. 1940. Pp. xxii, 531. $4.50.)

BACKMAN, J., editor. *Investment dynamics: a symposium.* (New York: Fiduciary Pubs. 1939. Pp. 26.)

Prepared for *Trusts and Estates* magazine and based on articles published in issues of December, 1938, through August, 1939.

BAKER, H. A. *Principles of retail merchandising.* (New York: McGraw-Hill. 1939. Pp. xiv, 462. $4.)

A textbook, with chapter questions and selected references.

BROOKS, W. C. *Company finance.* (London: P. S. King. 1939. Pp. 100. 6s.)

CARPENTER, H. G. *The letters of an investment counsel to Mr. and Mrs. John Smith.* (New York: Harper. 1940. Pp. xi, 197. $2.50.)

CRUMBAKER, C. *Organizing and financing modern business.* (New York: Wiley. 1939. Pp. x, 644. $3.75.)

This volume deals with the problems of organizing and promoting new business concerns and combinations of old ones. The important problems treated include: the traditional types of business organization to which is added the business syndicate; the legal rights and duties and economic functions of stockholders, directors, and management under corporate laws and charters; capitalization, instruments of long-time finance, and provisions for working capital; budgeting; and finally failure and reorganization.

The distinctive feature of the work is the point of view assumed. The problems of organization and finance are treated from the standpoint of "institution" or "going concern." Thus they become not the traditional problems of and for management but general economic and social problems which are of concern to the average citizen for whom indeed the book was largely written. In keeping with this there are chapters on blue-sky laws and public regulation of the security markets.

The treatment of the subject matter is mostly analytical and descriptive, only a limited amount of statistical data being utilized. The work is more fully documented than usual. In addition valuable bibliographical references are found at the end of each chapter.

For the general reader, as well as for the student of business organization and

finance approaching the subject from the general economic point of view, this volume fills a gap long open in the literature of the subject.

JOHN E. KIRSHMAN

DAVIS, R. C. *Industrial organization and management.* (New York: Harper. 1939. Pp. xxii, 636. $4.)

A textbook with problems covering business, production, and quality control; plant location; handling of materials; purchasing; salvage; personnel; industrial health; labor relations; employee training, and budgetary control. "Virtually a new text rather than a revision of *The Principles of Factory Organization and Management.*"

GILBERT, J. C. *A history of investment trusts in Dundee, 1873-1938.* (London: P. S. King. 1939. Pp. 144. 6s.)

GREIDINGER, B. B. *Accounting requirements of the Securities and Exchange Commission for the preparation of financial statements.* (New York: Ronald. 1939. Pp. xviii, 517. $5.)

GRETHER, E. T. *Price control under fair trade legislation.* (New York: Oxford Univ. Press. 1939. Pp. x, 517. $5.)

Mr. Grether is qualified to speak on the increasingly important topic of resale price maintenance under state "fair trade" laws by his earlier British study, his work for the NRA, and his exhaustive researches into retail competition and price maintenance in his own state, California. This state is especially important, since it has pioneered in the present era of fair-trade laws. It is astonishing to find that between 1931 and 1938 all but five states adopted such laws, just as it is disquieting to observe so much legislative disregard of both theory and experience and so much careless haste—amusingly illustrated by the repeated copying of the same acts, even to the same serious misprints.

The first half of the book outlines the legislative and judicial history of recent years, especially in California, and describes in some detail the price cutting and price maintenance problems of the main branches of retailing in that state. While the factual study hardly extends to other states, there is little doubt that the same general conditions would be found elsewhere. The second half comprises a closely reasoned analysis—perhaps too difficult as an introduction to this field, but essential to all workers in it—of the use of loss leaders, the interests of manufacturers, distributors, and consumers, and the general problems of enforcement and control of resale prices. The appendices summarize the fair-trade laws and tabulate the surveys on prices before and after price control, on trade opinions, and on profits.

The author's position is perhaps closer to that of most economists who have opposed resale price maintenance as unfair to the consumer than to that of the small minority who have ardently favored it; but, influenced as he is by the monopolistic competition analysis, which he applies to retailing, he lacks faith in free competition. As for the experience with the state laws, he believes serious evil has been avoided only by trade resistance to their application or enforcement in many commodities. Among his constructive suggestions, there may be singled out the limited one to ban such dishonest uses of loss leaders as deliberately failing to keep stocks, without touching their healthy use in drawing customers into low-price stores, and the much

broader suggestion that the states explore the possibilities of government licensing and price-fixing in the retail field.

SIMON N. WHITNEY

GROSSMAN, L. W. *Investment principles and practice.* (New York: Longmans Green. 1939. Pp. x, 266. $1.)

A cursory treatment of the subject in a form designed only for elementary students.

HALL, F. P. *Government and business.* 2nd ed. (New York: McGraw-Hill. 1939. Pp. xii, 455. $4.)

HAROLD, G. *An outline of corporation finance.* (New York: Barnes and Noble. 1939. Pp. 276. $2.

VON HAYEK, F. A. *Profits, interest and investment.* (London: Routledge. 1939. Pp. viii, 266. 6s.)

KIMBALL, D. S. and KIMBALL, D. S., JR. *Principles of industrial organization.* 5th ed. (New York: McGraw-Hill. 1939. Pp. xix, 478. $4.)

KIMBALL, M. *Principles of corporate finance.* (New York: Longmans Green. 1939. Pp. ix, 306. $1.)

As an educational tool, this book, an addition to the paper bound American Business Fundamentals series, is a definite contribution. The author has avoided pet hobbies, individualistic terminology, and last words on controversial subjects. Instead, he presents a straightforward, up-to-date, well balanced, step-by-step exposition of the fundamentals of corporation finance, including procedures generally followed.

The usefulness of this volume is augmented by a chart giving cross-references of supplementary readings (p. vi); selected references (pp. vii-viii); questions based on each chapter (pp. 277-290); selected readings on each chapter (pp. 291-297); and a well organized index. Footnotes are fairly generously used for references, sources and clarifying examples.

Whether or not this text is regarded as too elementary to meet the requirements of individual courses, it will be a welcome reference book for instructors and students.

DONALD M. HALLEY

KNAPPEN, L. S. *Revenue bonds and the investor.* (New York: Prentice-Hall. 1939. Pp. xiii, 329. $3.50.)

Prior to the creation of the Port of New York Authority in 1921, revenue bonds were relatively unimportant in this country. Today, the par amount of revenue bonds outstanding exceeds $1,000,000,000. In fact, this vehicle of finance has recently been used on an increasing scale not only by states through specially created agencies and municipalities, but even by our federal government.

Both the statutory and common law in respect to full faith and credit obligations of states and municipalities has been fairly well standardized. This does not apply, however, to revenue bonds. The statutory authority under which such bonds may be issued varies widely from state to state, which means, of course, a variation not only in the protective rights given the investor as between states, but also in the legal remedies that may be applied in case of default.

The author has covered his field exceptionally well in this volume. Particular attention is given to an analysis of the statutory provisions under which such bonds are issued and to the more important protective provisions which are substituted for the full faith and credit pledge found in direct obligations of political units. The legal remedies which may be sought through court action in cases of default are likewise well treated. An interesting chapter on the history of defaults is given.

Other chapters deal with methods of marketing revenue bonds, the relative performance of such bonds as compared with full faith and credit obligations, and leading types and users of revenue bonds. The use of revenue bonds as a vehicle for obtaining grants and loans from the federal government in connection both with the Reconstruction Finance Corporation and the Public Works Administration is discussed. A full analysis is also undertaken of different types of statutory authorities.

The author not only has supplied copious references throughout the book, but has also prepared appendices containing complete citations by states of revenue bond statutes (Appendix A), citations by states of important revenue bond cases (Appendix B), a bibliography, and a listing of all cases cited.

The book should prove exceptionally valuable to institutional investors, to advanced students of investment, and to lawyers who wish a convenient summary treatment of the subject.

R. E. BADGER

LEWIS, C. W. *Price maintenance in Knoxville, Tennessee, under the Tennessee Fair Trade act of 1937.* Univ. of Tennessee Record, vol. 42, no. 6. (Knoxville: Univ. of Tennessee. 1939. Pp. 64.)

LYONS, G. J. and MARTIN, H. C. *The strategy of job-finding.* (New York: Prentice-Hall. 1939. Pp. 391. $4.)

MCKINSEY, J. O. *Bookkeeping and accounting.* 4th ed., rev. by EDWIN B. PIPER. Vol. I. (Cincinnati: South-Western Pub. Co. 1939. Pp. 542. $1.64.)

MCKINSEY, J. O. and NOBLE, H. S. *Accounting principles.* (Cincinnati: South-Western Pub. Co. 1939. Pp. x, 885. $3.75.)

MCMULLEN, S. Y. *Federal income tax accounting: a practical course for basic instruction.* (New York: Ronald. 1939. Pp. xvii, 315. $5.)

It is encouraging to find a writer who is under no illusions about reconciling income-tax procedure with that will-o-the-wisp "good accounting practice." There are frequent declarations to establish the proposition that " 'taxable net income' is a statutory concept and no conclusions drawn on the basis of logic or accounting will necessarily apply. The sole test is the intent of Congress as set forth in the Act and interpreted by the Treasury Department, by the Board of Tax Appeals, and by the courts" (p. 33). It is no accident that this book contains much law.

The reader should not conclude that the author has merely restated the Act and the Treasury Regulations. The book is designed to prepare students for the business of filing returns and to emphasize business policy. Well selected cases are used to illustrate many points. The book is elementary and no attempt is made to include unusual situations. The chapter on losses and bad debts (9) is very good and the section on depreciation (chapter 10, part 1) would do credit to a text on accounting theory. Some may be concerned with the author's definition of a tax—"A tax is an exaction (of money or other valuable property) to defray the cost of the activities of government" (p. 1).

For there is no attempt to show why a fee and a special assessment do not fall within these boundaries. However such matters are negligible. After all, "whether an item is included for tax purposes, or whether an item is an allowable deduction, is statutory, that is, *it is a matter of law*" (p. 8).

The changes made in the 1938 Act are summarized at the close of each chapter. The book is in loose-leaf form so that additions may be included from time to time.

EDWARD G. NELSON

MANDEL, H. R. *Real estate management: a manual for profitable property operation.* (New York: Ronald. 1939. Pp. xiv, 218. $4.)

MAYHEW, C. P. *Planned investment.* (London: Fabian Soc. 1939. Pp. 48. 1s.)

MEAD, E. S. and GRODINSKY, J. *The ebb and flow of investment values.* (New York: Appleton-Century. 1939. Pp. 467. $5.)

MITCHELL, W. N. *Organization and management of production.* (New York: McGraw-Hill. 1939. Pp. xii, 417. $4.)

This book, written for use in collegiate schools of commerce, differs from most texts on industrial management in both scope and treatment. The usual subject matter is here: organization, product design, plant design and layout, maintenance and depreciation, purchasing, inventory control, time study, wage payment, production control, etc. These topics are presented in 7 chapters which total 245 pages. In this space complete coverage has been attained by streamlining the exposition. In addition, four general extensive chapters appear at the outset. These deal with production economics in the sense in which the term is employed in courses in economics. Here are found such topics as the time factor in production, cyclical changes, non-rhythmical fluctuations, conservation of natural resources, industrial research, specialization, the machine, transfer of skill, and regional differentiation of industry.

One-fourth of the book is a working appendix which gives for each chapter an extended bibliography, questions for class discussion, and several problems. The author expects teachers to devote the classroom discussions to practical problems and concrete cases with the students preparing for these by reading widely among the suggested references. If this expectation is realized it will make for a much more intensive first course than is usually found in this field. As to specific points, there is little to criticize and much to commend. Especially noteworthy are the graphic portrayals of managerial concepts and equations.

ALFRED H. WILLIAMS

MONCHOW, H. C. *Seventy years of real estate subdividing in the region of Chicago.* Stud. in the soc. sci. no. 3. (Evanston: Northwestern Univ. Grad. School. 1939. Pp. viii, 200. $2.25.)

MOONEY, J. D. and REILEY, A. C. *The principles of organization.* (New York: Harper. 1939. Pp. x, 223. $3.)

MYER, J. N. *Financial statement analysis: principles and technique.* (New York: Author. 1939. Pp. xvii, 270. $3.25.)

This treatise has been prepared as a provisional text and is a preliminary edition of a larger work now in preparation. The discussion of techniques is elementary but straightforward. There are 60 pages of problem material. It is to be hoped that in the completed form, the discussion of interpretation of results will acquire greater depth. This reviewer regrets that the typical dis-

cussion of the important problem, financial statement analysis, reflects so little the essential backgrounds in economics, finance and operations. There is no technical substitute for such background.

W. P. FISKE

POMEROY, D. A. *Business law.* 2nd ed. (Cincinnati: South-Western Pub. Co. 1939. Pp. xiv, 906.)

PUTNEY, W. B., 3RD. *Stabilization of securities by an underwriter.* (New York: Author. 1939. Pp. 57. 75c.)

RADIN, M. *Manners and morals of business.* (Indianapolis: Bobbs-Merrill. 1939. Pp. 270. $2.50.)

REYNOLDS, L. G. *The control of competition in Canada.* Harvard stud. in monopoly and competition, 2. (Cambridge: Harvard Univ. Press. 1940. Pp. xiv, 324. $3.50.)

ROSE, D. C. *The policyholders' interest in equity investments.* Address at the 34th annual meeting, American Life Convention, Chicago, Ill., Oct. 3, 1939. (New York: Investment Counsel Assoc. of America. 1939. Pp. 28.)

SCUDDER, L. W. *Accountancy as a career.* (New York: Funk and Wagnalls. 1939. Pp. 169. $1.50.)

SHERWOOD, J. F. and PENDERY, J. A. *Social security and pay-roll accounting.* 2nd ed. (Cincinnati: South-Western Pub. Co. 1939. Pp. 256. $2.60.)

Covers federal and state social security laws; non-technical.

SHIRK, A. U. *Marketing through food brokers.* (New York: McGraw-Hill. 1939. Pp. 329. $3.50.)

SPENGLER, E. H. and KLEIN, J. *Introduction to business.* 2nd ed. (New York: McGraw-Hill. 1939. Pp. xvi, 786. $4.)

The effort to make business courses "practical" generally proceeds on the ill-founded hypothesis that theory must be avoided as incompatible with the treatment required. Business training has suffered now for over two decades from the result, which is the elimination of all but the most superficial sort of analysis. There is left for instructional purposes factual reviews, the description of business activities and practices, and the formulation of business problems which can rarely be analyzed with the limited intellectual equipment offered.

The economics student who wants to understand how the economic system operates, and the business student who wants to understand how to operate parts of the system are fundamentally not so far apart in their training requirements as is sometimes supposed. They both need training in the intellectual tools and methods of analysis. Recent developments in the field of theory, particularly with reference to production, costs, prices, and the firm, offer some possibility of injecting more analysis into business courses. The possibility has not yet been seen by authors of business textbooks, however.

This book is intended for an introductory course in business. The revision has been wisely directed to alter the organization, to cut and expand sections, and to include a discussion of recent developments. The result is a distinct improvement on the earlier edition. Judged in terms of the traditional standards, which this book follows, it is one of the best of its kind. Fifteen or twenty years ago this sort of treatment would have been a notable achievement. Today one is justified in doubting the wisdom of offering students an introduction to business which formulates few of the typical firm problems, scarcely mentions the intellectual tools and methods necessary for the analysis of such

problems, and fails to awaken interest in the search for additional specialized knowledge with which the student might in time formulate reasoned opinions. Business education could well afford to undertake in earnest this proper and more fundamental task. The place to begin is in the introductory course and the introductory textbook. With properly organized lectures or discussions even this textbook could provide a beginning.

ROBERT D. CALKINS

TOSDAL, H. R. *Problems in sales management.* 4th ed. (New York: McGraw-Hill. 1939. Pp. xx, 894. $6.)

This publication is one of the Harvard problem books. It retains the organization and the introductory statements to the 11 major sections of the third edition. The revision appears in the changes that have been made in the number, the selection, and the arrangement of the problems. This edition has approximately 35 fewer problems and about 75 fewer pages than the preceding volume. It is one among the very few revisions in which one finds an author reducing the size of his book! He has increased the amount of space devoted to sales programs, sales promotion, and sales organization, and has reduced the amount given to merchandising, prices and terms of sale, sales planning, and management and control of sales operations. The amount of space given to research and to distribution policies remains about the same.

There are approximately 90 new problems which present recent material. About 45 problems carry the old titles; some of these "cases," however, have been revised and modernized.

The major purpose of the book is to furnish adequate, or at least fairly satisfactory material that may be used to aid students in developing "the habit of making decisions upon fact and evidence rather than upon guesswork."

Whether this purpose will be attained depends upon two important factors in addition to the well selected materials, *viz.,* a well-informed and skillful teacher, and students with sufficient business background and mental maturity to be able to understand the terminology of the problems and to visualize the administrative implications presented and suggested. The third edition was a distinct improvement over the earlier editions of the book. This fourth edition introduces minor refinements, improves the arrangement of problems, eliminates the less desirable ones and adds enough new ones to bring the book up to date.

J. FREEMAN PYLE

WEISSMAN, R. L. *The new Wall Street.* (New York: Harper. 1939. Pp. x, 308. $3.)

The author has written an intelligent and interesting semi-popular description of the major changes that have taken place in the investment banking machinery of the United States during the past six years. He discusses briefly some of the problems to which the reform legislation has given rise.

Mr. Weissman has sought to maintain a balanced viewpoint in his discussion of such controversial problems as the thin markets resulting from federal regulation of the stock exchanges, administration of the Public Utility Holding Company act of 1935, and restrictions upon short selling. He does reach the conclusion that "new regulations have resulted in less activity; lessened activity, in turn, has created a more discontinuous market. There is no way

of establishing that any one of the regulations . . . has been more responsible than any other."

Initial chapters on "People of the Street" and "The Wall Street mind" are in the popular vein. Those that follow on "The Securities and Exchange Commission," "Stock Exchange reforms" and "The Commission and speculation" contain considerable descriptive material. Separate chapters are devoted to recent changes and new regulations affecting the over-the-counter market and new financing. A valuable feature of the book is the references to the effects of new conditions in the security markets and the security legislation upon corporate financial policies.

In a concluding chapter on "The future of Wall Street" the author urges the financial district to "remove the association of the financial world with opposition to all measures of reform." He regards the failure to develop a technique which would make it profitable for dealers to merchandise aggressively to small investors bonds and stocks of the highest grade as the "organic defect of the financial world."

JULES I. BOGEN

Bond portfolios for banks. Proc. of conference on bond portfolios. (New York: N. Y. State Bankers Assoc. 1939. Pp. 260. $2.)

Economic power: hearings, 76th Cong., 1st sess., pursuant to Public Resolution 113 (75th Cong.). Parts 5, 5-A. (Washington: Temporary Nat. Econ. Committee. 1939. Pp. 1647-2304; 2305-2417.)

Eleventh Boston Conference on Distribution, 1939: a national forum for problems of distribution. (Boston: Boston Chamber of Commerce. 1939. Pp. 114. $3.75.)

Investment trusts and investment companies: report of the Securities and Exchange Commission. Part. 3. *Abuses and deficiencies in the organization and operation of investment trusts and investment companies.* Chapter iv. *Problems in connection with shifts in control, mergers and consolidations of management investment companies.* (Washington: Securities and Exchange Commission. 1939. Pp. 631.)

Trading for others in commodity futures. U. S. Dept, of Agric. circ. no. 539. (Washington: Supt. Docs. 1939. Pp. 28. 5c.)

Capital and Capitalistic Organization

Seeds of Destruction: A Study in the Functional Weaknesses of Capitalism. By JOHN M. BLAIR. (New York: Covici-Friede. 1938. Pp. xix, 418. $4.00.)

The persuasive arguments of this book are addressed to the capitalists and wage-earners of the United States. The arguments are put in the form of "axioms," "aggravating trends," and "corrective techniques," either automatic or artificial. But these forms of statement are resolved into two lines of argument, the one addressed to capitalists and investors, the other to wage and salary earners, leading to the central conclusion of the disappearance of the capitalist system in the United States.

The arguments addressed to wage-earners are based mainly on the com-

bined arguments of Marx and Rodbertus nearly a century ago. They turn on a progressive increase of unemployment and a relative decrease of wage-rates and wage-incomes, compared with prices and upper-class incomes derived from profit, rent and interest. The arguments addressed to capitalists and investors are the increasing taxes, debts and lack of confidence. The two lines of argument come together on the proposition of Rodbertus that the system does not of itself provide enough purchasing power on the part of consumers to take off the markets most of the products created by producers.

While the author does not commit himself to any system that might take the place of capitalism, he leads the way to either the Rodbertus or the Marxian dictatorship, the former in the interest of owners, the latter in the interest of wage-earners. Each of these alternatives or the two in coöperation as nazism and communism, would apparently eliminate the four "axioms," the eight "aggravating trends," and the need of the four "corrective techniques."

For the capitalist system, or capitalism, is defined dynamically, that is, as a set of miscellaneous trends, which when coördinated become a general trend from a mainly *laissez-faire* system of private ownership and profit to a mainly governmental system of regulated production and distribution. "Capitalism" is not "fixed" at any point, but is to be found almost anywhere, differing in "degree," between the two extremes. Wherever private ownership and profit survive there is a degree of capitalism, and the axioms, insofar, are violated, the destructive trends are aggravated, the corrective techniques are futile.

The foundation of his argument is technological—the increasing man-hour efficiency of capitalism. On this foundation is built the increasing inflexibility of prices on account of the increasing part played by capital goods supplemented by corporations and labor unions; the ineffectiveness of high incomes in creating markets for these goods; and the increasing pressure on participants occasioned by disappearing frontiers. On these several accounts there are the increasing costs of distribution and advertising, the increasing subordination of both laborers and investors to centralized banking control. The corrective techniques come against the increasing impracticability of maintaining both high profits and high wages in the face of these trends.

While these arguments are mostly of long standing, pro and con, in economic theorizing, the great gain accomplished in this book is the picture of their interaction tested by Blair's use of the recent abundance of statistical investigations in the United States.

He limits himself to the period of the 1920's and 1930's, because during the first decade of that period the administration at Washington was more *laissez-faire* than ever before, the collapse was more destructive dur-

ing the second decade, the corrective techniques more futile, the official statistics more complete.

There is, however, as suggested by these decades, a "cycle" distinguished from his "trends"—the credit cycles which began a hundred years ago in America with the incoming of commercial banks and now culminating in the federal reserve system—a cycle not contemplated by Blair in his catalogue of axioms, trends and techniques. Yet this credit cycle might, with justification, be cited as more characteristic of "capitalism," more aggravating, and its proper control as more hopefully corrective than many or most of the techniques which he elaborates. With this as perhaps a seventeenth item in his list, tracing its effect on the other sixteen, as he does among the sixteen themselves, the book might well be designated a promising pioneer in the twentieth century reconstruction of economic science on the principles of "relativity."

JOHN R. COMMONS

University of Wisconsin

The Evolution of Finance Capitalism. By GEORGE W. EDWARDS. (New York: Longmans Green. 1938. Pp. xvi, 429. $4.00.)

The phrase "finance capitalism" (of foreign origin) in the title to this work sounds strange (and awkard) to American ears. However, it is no sooner adopted than discarded in the text in favor of "security capitalism" which appears on every page of the work thus becoming somewhat irksome. "Security capitalism" is defined as "the economic system which is financed through the conversion of the *saving* (italics supplied) of investors into security investment." Saving originates with "consumers, whether individuals or corporations, while investment denotes the forms of evidencing the transfer of the saving to entrepreneurs or governments." Saving results from "collective choice" while investment arises from "collective action." These definitions are somewhat confusing and may mislead the reader.

In reality this volume (modest in size) attempts a history of capitalism in the leading nations of the world, east and west, with special emphasis on the United States. Security capitalism in all nations treated is summarily forced into the identical pattern of rise, development, and crisis, the latter being evidenced by the financial crash of 1929. It matters nothing that recovery has since taken place in some of the leading nations concerned while in others it has been retarded by forces unfavorable or hostile to private enterprise, or that overstressed nationalism has seriously interrupted normal development.

The underlying theme of the volume is that intangible wealth has created the characteristic problems of irresponsible management of industry and

government, over-capitalization, financial instability, and disequilibrium of savings and investment. Somehow these features of capitalism led to the world economic crisis of 1929 and after. The more fundamental matters of division of labor, exchange, the use of money, markets for goods, and technical progress seem to have no bearing on the economic difficulties of the world today. Nor does it matter that severe crises have occurred in the past prior to the development of the era of security capitalism. It is enough that intangible property, representing underlying wealth and evidencing separation of ownership and management, prevails to a considerable extent today.

In the end the historian turns doctor and prescribes a Federal Finance Board for the coördination of all governmental and private financial agencies. Under the aegis of its wisdom savings are to be doled out here and there for prescribed use as needed in the judgment of the Board, standards are to be imposed upon the erring financiers, and all is to be sanctified by governmental unction. In view of the financial impasses to which government has now and in times past brought us, only the uncritically minded can be expected to respond to such a program.

Although there are shortcomings in this volume, yet of especial value are many citations, quotations from contemporaneous literature, and the collection of statistical material unavailable elsewhere.

JOHN E. KIRSHMAN

University of Nebraska

NEW BOOKS

BOGERT, G. G. *Cases on trusts.* (Chicago: Foundation Press. 1939. Pp. 928. $6.)

COON, H. *Amer. Tel & Tel: the story of a great monopoly.* (New York: Longmans Green. 1939. Pp. vii, 276. $3.)

The title is a well chosen description for this book. Three chapters are devoted to the early struggles of the promoters. The next fourteen chapters relate to the development of the Bell System between the time that Theodore N. Vail went with the National Bell Telephone (1878) and the present. The final two chapters revert to the economic aspects of the telephone system.

Although the reports on the recent investigation of the telephone industry by the Federal Communications Commission were the main source of information, Mr. Coon has drawn upon many other sources. In the chapters covering the development of the Bell System, emphasis is placed on the influence of personalities. This is especially true in the case of Mr. Vail. In fact, the reader is likely to set aside the book with the impression that the Bell System is the result of Mr. Vail's wisdom and foresight. Patents, corporate inter-relationships, financial growth and business policies of major importance, are some of the other aspects of the period of development which are stressed. The author's style is easy and direct and his choice of material such as to make the book very readable.

The author takes the position that federal regulation is necessary. State regulation is deemed inadequate because of the control over the associated

company costs which is exercised by the American Telephone and Telegraph Company through its license service contract and through the use of the Western Electric Company as a manufacturing and purchasing agency. In these matters Mr. Coon's views are in agreement with those set forth in a "Proposed Report" written by Paul A. Walker, the commissioner in charge of the recent investigation of the telephone industry by the Federal Communications Commission. In fact, numerous references to and quotations from this report are included.

The practice of the Bell System in the matter of depreciation charges and the relation thereof to rate regulation is commented upon in a number of instances. It must be said that the author does little to clear up this question. Instead, he adopts the erroneous view that is so common in connection with depreciation reserves and talks of these reserves as though they were funds. This misunderstanding is evidenced on several occasions. It seems that Mr. Walker's "Proposed Report" is also guilty of this same error. At one point the report is quoted as follows: "5. The accumulated depreciation reserves, as well as future additions thereto, should be held as trust funds to be administered by the company for the benefit of subscribers present and future. 6. The earnings on the reserves should accrue to the benefit of subscribers."

W. E. DICKERSON

CRUM, W. L. *Corporate size and earning power.* (Cambridge: Harvard Univ. Press. 1939. Pp. xi, 418. $4.)

GRAZIADEI, A. *Le crisi del capitalismo e le variazioni del profitto.* (Milan: Bocca. 1940. Pp. xi, 225. L. 25.)

MAESTRI, R. *Capitalismo y anticapitalismo (una exploración metodológica).* (Havana: Inst. Nac. de Previsión y Reformas Sociales. 1939. Pp. 36.)

ROSE, J. R. *Public utility regulation in Pennsylvania.* A dissertation. (Philadelphia: Univ. of Pennsylvania. 1939. Pp. viii, 172.)

SCHMIDT, E. P. *The economics of public utilities.* Vol. II. (Ann Arbor: Edwards Bros. 1939. Pp. 201. $1.)

Labor and Labor Organizations

NEW BOOKS

AIKIN, C., editor. *National Labor Relations Board cases.* (New York: Wiley. 1939. Pp. 120. $1.)

CARROLL, M. R. *What is collective bargaining?* (New York: Longmans Green. 1939. Pp. 117. $1.75.)

CHEEK, J. B. *The National Labor Relations act: a guarantee to collective bargaining.* (Washington: Nat. League of Women Voters. 1939. Pp. 15. 10c.)

FINE, R., compiler. *Profit-sharing: selected references, 1923-1939.* (Washington: U. S. Dept. of Labor Library. 1939. Pp. 18.)

Supplement to "Profit-Sharing and Labor Copartnership: A List of Recent References," in *Monthly Labor Review* for April, 1923.

FISHER, W. E. *Economic consequences of the seven-hour day and wage changes in the bituminous coal industry.* (Philadelphia: Univ. of Pennsylvania Press. 1939. Pp. xv, 130. $2.)

The curve of regulation of wages and hours by the state is still rising.

It is followed after a considerable lag by development of criteria for judging such controls. Mr. Fisher's study of the bituminous coal industry is valuable as a concrete example, and as a study in method.

The seven-hour day was applied to bituminous coal in April, 1934, by agreement between unions and operators. At the same time wage rates were increased enough to provide the same or higher weekly earnings. This agreement was promptly approved by NRA and applied to all outlying fields. Because regulation was continued after NRA, Mr. Fisher was able to study its effect over four years.

The first requirement for getting the right answers is asking the right questions. The author traced the effect of control upon labor costs, non-labor costs, upon output per man and the rate of mechanization, upon changes in the total labor force, and total working time, upon annual earnings, and upon the accident rate.

The important conclusion is that the four-year period was divided sharply into two parts. The immediate direct effect of the reduction in output per man (10.0 per cent) was a slight increase in employment (1.8 per cent) and a larger increase in working time (8.1 per cent) and annual earnings (14.9 per cent). In the second period, the effects were increased mechanization, falling employment for the same volume of production (—12.0 per cent), about the same working time (+1.4 per cent) but higher annual earnings for the men still employed (35.8 per cent). This division between immediate effects and final effects after compensatory adjustments by management, is basic for all studies of the regulation of employment by law or contract.

In the first period when output declined 10 per cent, costs rose 14.5 per cent. At the same time, because of government control of prices, sales income increased 18.3 per cent, and operators' margins rose 165.9 per cent. Since some of the mines had been operating at a loss, this is not proof of excess profits. It is evidence that the first and heaviest increase in costs was wholly passed on to the consumer. No study was made of costs and profit margins in the period following compensatory reductions in labor cost.

A second curious result was the increase in fatal mine accidents of 12.8 per cent. Non-fatal accidents also rose slightly.

These results must be viewed within the framework of the industry and the time. The new rates were put into effect on the rising phase of the business cycle, in an industry with high labor costs, where mechanization had not been completed. The operators had the benefit of simultaneous control of prices, and a margin of cash for purchase of new machinery.

Students of the social diseases of low wages and over-long hours are prescribing legal enforcement of higher wages and shorter hours as a remedy for a real and long-continued evil. Only the most rigid economic analysis can say whether the remedy actually cures the disease, or how a better remedy can be found.

EDNA LONIGAN

GILL, C. *Wasted manpower: the challenge of unemployment.* (New York: Norton. 1939. Pp. 312. $2.75.)

Mr. Gill's long experience as a federal relief administrator qualifies him highly to discuss the problem of American unemployment and adds significance to his attitude that the types of remedies tried since 1933 should be continued in larger doses.

Nearly the first half of Mr. Gill's book is devoted to an exposition of unemployment which, though familiar to the economics student, can bear repetition for the sake of the hypothetical intelligent layman. However, a theme not found in the old discussions of the same subject is the author's emphasis of an "irreducible minimum of unemployment" and the "stagnation" of the economic system to which he attributes our chronic mass unemployment.

Tracing the national administration's attacks on unemployment, Mr. Gill finds two general salutary results. The relief problem was approached in the most desirable way through the provision of productive work for the unemployed. The recovery problem was mitigated by increasing purchasing power and stimulating industrial activity. A correlation between business since 1933 and federal public investment is noted. The latter served to bolster private investment which had lost its historic initiative and faced a future of diminishing outlets. In a chapter on the comparable efforts of European governments, no reason is seen for regretting our own.

The future program Mr. Gill envisions requires "a positive social policy" and recognition that the unemployment problems are not temporary, but here to stay. Economic stagnation threatened by under-investment and under-employment can be met by enlarged federal programs of work and employment. The W.P.A. should be opened to the unemployed without reference to need and supplemented by a public works system stabilized at a high level. Accompanying measures should include loans and subsidies to key industries, low interest rates, lower and less rigid prices, taxes resting more heavily on surplus savings than on consumption and new investment, and expanded and liberalized social security programs.

While Mr. Gill is cognizant of the "many-sided nature of the unemployment program," he is not dissuaded by thought of the enormous technical difficulties entailed in the planning, installation and operation of the various units of the program. One infers from his sketch of the rapid evolution of the WPA out of the FERA and CWA that he anticipates that modification could readily be effected to meet future contingencies such as failure of any unit to work out as expected or to coördinate properly with other features on the program. Here, Mr. Gill's optimism contrasts with his severely realistic view of the present-day unemployment situation.

HARRY MALISOFF

GREEN, W. *Labor and democracy.* (Princeton: Princeton Univ. Press. 1939. Pp. 194. $2.50.)

LEISERSON, W. M. *Labor's right to organize.* Day and hour ser. no. 22. (Minneapolis: Univ. of Minnesota Press. 1939. Pp. 23. 25c.)

MALICK, C. P. *Labor policy under democracy.* Stud. in the Soc. Sci., ser. C., vol. i, no. 1. (Boulder: Univ. of Colorado. 1939. Pp. 130.)

This study is a comparative "analysis of democratic methods of dealing with labor disputes and the foundations on which industrial peace rests." It considers the situation in three countries, Great Britain, Germany under the Weimar Republic, and Australia, including references to New Zealand, as illustrations of three different approaches "in which the rôle played by government increases progressively" from voluntary conciliation through compulsory arbitration.

The author next takes up the labor law in the United States, discussing the legal status of collective agreements, legislation pertaining to the railroad in-

dustry, and the problems facing the various federal labor boards. The concluding chapter presents (1) a defense of collective bargaining—a rather curious discussion both from the point of view of what is actually said on the subject and of what has been said in the earlier chapters and (2) proposed governmental machinery for handling labor disputes. Regarding the latter, the author makes much, and rightly so, of the desirability in the establishment of public agencies of distinguishing between disputes over "interests" and disputes over "rights," a distinction which was fundamental in the German machinery under the Weimar Republic and which is recognized at the present time in the federal agencies dealing with the railroad industry in the United States.

T. L. NORTON

ROETHLISBERGER, J. J. and DICKSON, W. J. *Management and the worker.* (Cambridge: Harvard Univ. Press. 1939. Pp. xxiv, 615. $4.50.)

In the spring of 1927 the Western Electric Company started certain experimental studies to discover the relations between conditions of work and the incidence of fatigue and monotony among employees. It was rather confidently expected that definite answers would be found in a year or less.

This book is a detailed account of how the experiment began, how the unsuspected complexities of the problem forced upon the investigators its restatement and extension again and again and prolonged the original study through five years and from the observation of five employees to more than twenty thousand. It is the inside story of a great experiment in the study of human relations in a factory as carried on by trained men at the plant with the collaboration of scientists at Harvard University in analyzing and interpreting the voluminous data obtained.

Fatigue, monotony, rest pauses, wage incentives, supervision, and other factors were found to be inseparably bound up with the individual's relation to the working unit and with this unit's relation to the factory group as a whole. The informal relationships based on cliques, group sentiments and the workers' appraisals of jobs and methods were found to be more potent in determining the workers' morale than were the formal groups and rules set up by the management. There was no simple answer to the problem of removing the workers' inhibitions respecting output.

To study the problem of the social satisfactions in the working environment that make the workers willing to coöperate, a system of interviewing was developed after much experimentation which won for itself the confidence and respect of the employees so that they were willing to talk freely and honestly about whatever was on their minds, pro or con, with regard to the work or their own problems outside the plant. Analysis and interpretation of these data enabled the management to make intelligent progress toward providing in connection with the work those social satisfactions which are a part of the worker's reward and which make him willing to coöperate more effectively in the common economic purpose of the enterprise.

Business managers will find the book valuable for its suggestions as to how to go about the study of their particular problem of improving morale and securing the benefits of increased output that come with it. Students of labor and social problems will find the book a mine of information as to practical methods of study, and this feature bulks largest in the book.

JAMES A. CAMPBELL

SHALLCROSS, R. E. *Industrial homework: an analysis of homework regulation, here and abroad.* (New York: Industrial Affairs Pub. Co. 1939. Pp. xi, 257.)

SHARP, M. and GREGORY, C. O. *Social change and labor law.* (Chicago: Univ. of Chicago Press. 1939. Pp. vii, 175. $2.)

SLICHTER, S. H. *Economic factors affecting industrial relations policy in the war period.* Industrial rel. monog. no. 3. (New York: Industrial Relations Counselors. 1939. Pp. 32. $1.)

STONE, N. I., assisted by CAHEN, A. and NELSON, S. *Productivity of labor in the cotton-garment industry.* Bull. no. 662. (Washington: U. S. Bur. of Labor Stat. 1939. Pp. viii, 139. 20c.)

STRACKBEIN, O. R. *The prevailing minimum wage standard: a study of the wage standard established by the United States government for the purchase of its supplies.* (Washington: Graphic Arts Press. 1939. Pp. vii, 187. $2.50.)

The author is a member of the Public Contracts Board, which undertakes the investigations to assist the Secretary of Labor on fixing the prevailing minimum wages which contractors must pay when they furnish the varied supplies purchased by the United States government (Public Contracts act of 1936). Inasmuch as minimum wages vary with locality, size of establishment, population density, division of manufacturing processes, policies of employers, length of service, degree of mechanization and other minor factors, the Board has a task of overwhelming complexity. The author discusses the application of the prevailing minimum-wage standards in the boot and shoe, iron and steel, aircraft, soap and cement industries. The presentation is weakened, somewhat, by the use of assumed statistical data in the discussion of the significance of locality in the boot and shoe industry, but minimum-wage determinations in the other industries are presented with much enlightening data gathered by the Board, as well as inside information about the reasoning which supported the varied recommendations. Producing establishments are grouped by zones, and median, modal or even quartile clusterings of wages are utilized for discovering standards which may be regarded as "prevailing." The book is appropriately dedicated "to the growing administrative spirit which seeks in facts the wisdom of its course." The wage regulations of the NRA, WPA, and PWA and government building and supply contracts are relatively new experiments in the United States, although such legal wage fixing has been undertaken for many years in Australia, New Zealand and England. This careful analysis of initial experiments is an important public service.

LUCILE EAVES

UMINSKI, S. *The progress of labor in the United States.* (New York: House of Field. 1939. Pp. 254. $2.50.)

VIAU, J. M. *Hours and wages in American organized labor.* (New York: Putnam's. 1939. Pp. xiii, 301. $2.50.)

This is a résumé of the movement for shorter hours and higher wages in the United States, with some description of early events in the history of labor unions and of wage-hour legislation which has nation-wide coverage. The book was undoubtedly planned for use as a textbook in Catholic schools and colleges. The writer's interest centers in the attitudes of labor leaders, industrialists, and others toward the desirability of shorter hours and higher wages, and toward collective bargaining as a means of achieving these aims. The book is therefore heavily weighted with citations from the speeches of Messrs. Gompers and Green, the proceedings of conventions of the American Federation of

Labor, the pronouncements of the National Association of Manufacturers, and the Encyclicals of Pope Pius XI and Pope Leo XIII.

Little use is made of the increasing volume of statistical materials now available on wage rates, earnings, hours of work, and employment in specific industries or occupational groups. Although the treatment is historical, no clear picture emerges of the changing economic fortunes of any one group of workers, or of American workers in general, as the result of legislative and collective bargaining efforts to secure shorter hours and higher wages. The appendix materials presented are not sufficiently dated or documented to be useful.

The organization of the material is confusing. There is, for example, a chapter on "The teaching of the church on hours and wages" inserted between discussions of various aspects of the National Industrial Recovery act. Its connection with the other material presented is not made clear. The discussion of the economic as opposed to the ethical aspects of wage and hour problems, which is scattered through the text, would have been clearer if concentrated in a single chapter.

Although elsewhere the writer shows an understanding of wage bargaining problems, the introductory chapter states (p. 18) that inequalities of bargaining power between workers and their employers are the result of differences in mental capacity in the two groups. The writer's conclusion may be summarized in the following quotation: "Labor was justified in demanding the shortening of the former extremely long work day and work week. Labor . . . through the process of shortening the daily and weekly hours of labor and insisting upon the same or higher money wage made great headway in securing for itself some of the gains in economic efficiency and progress. . . . It is very probable that the work week as now constituted, about 40-44 hours, should be considered a normal work week. The problem of increasing the real wages of labor and of absorbing our vast army of unemployed can be solved more efficiently . . . if labor would insist upon a more equitable distribution of income and leave the length of the work week as it stands." After some discussion of the latter point in relation to the findings of recent Brookings studies, Sister Viau concludes further that reduction of prices will benefit a larger proportion of the population than wage increases, and is therefore to be preferred as a means of securing a "more equitable distribution of income."

GLADYS L. PALMER

WAGNER, A. *Labor legislation in China.* (Peking: Yenching Univ. 1938. Pp. iii, 301.)

WRIGHT, C. M. *Here comes labor.* (New York: Macmillan. 1939. Pp. 122. 60c.)

This little book on labor is written for popular consumption and seeks to explain such current questions as: what does labor want, where is it going, and what does labor's present resurgence mean for the average citizen? In answer to these questions the author points out that labor wants freedom to organize and bargain collectively, recognition of the unions by employers, and more of the material goods necessary to provide a higher standard of living. As to where labor is going and what it means, the author makes brief observations on labor structure (including the C.I.O.-A. F. of L. split), labor practices, labor and politics, and New Deal labor legislation. The author views with some concern the possibility of labor's losing some of the freedom for which it has fought so long through too great a reliance upon legislation.

Not a book for the labor student, its easy journalistic style and non-technical language should give it a wide appeal to the average layman for whom it is intended.

E. B. McNATT

ZIMAND; G. F. *Child labor facts, 1939-1940.* (New York: Nat. Child Labor Committee. 1939. Pp. 38. 25c.)

Annual report of the chief inspector of factories for the year 1938. (London: H. M. Stationery Office. New York: British Lib. of Information. 1939. Pp. 133. 60c.)

Collective bargaining in the newspaper industry: a study of newswriters organizations and representative unions in the mechanical trades and an analysis of the effects upon interstate commerce of industrial conflict within the industry. Nat. Labor Rel. Board bull. no. 3. (Washington: Supt. Docs. 1939. Pp. x, 194. 30c.)

Facilities for the use of workers' leisure during holidays. Stud. and rep., ser. G, no. 5. (Geneva and New York: Internat. Labour Office. 1939. Pp. 96. 75c.)

Hourly earnings in knit-goods industries (other than hosiery) September, 1938. From *Monthly Labor Review,* Nov., 1939. (Washington: Supt. Docs. 1939. Pp. 30.)

Hours and earnings in certain men's-wear industries: caps and cloth hats, neckwear, work and knit gloves, handkerchiefs. Bull. of the Women's Bur. no. 163-6. (Washington: Supt. Docs. 1939. Pp. v, 22. 5c.)

Industrial Commission of Wisconsin: biennial report, 1936-1938. (Madison: Ind. Commission of Wis. 1939. Pp. 78.)

Legal status of women in the United States of America, January 1, 1938: report for California. Bull. of the Women's Bur. no. 157-4. (Washington: Supt. Docs. 1939. Pp. 20. 5c.)

Money disbursements of wage earners and clerical workers in five cities in the West North Central-Mountain region, 1934-36. Bull. 641. (Washington: U. S. Bur. of Labor Stat. 1939. Pp. 390. 35c.)

National Labor Relations act: hearings, 76th Cong., 1st sess., on S. 1000, S. 1264, S. 1392, S. 1550, S. 1580, and S. 2123 bills to amend the National Labor Relations act. Parts 12-23. (Washington: Senate Committee on Educ. and Labor. 1939. Pp. 2175-2379; 2381-2573; 2575-2749; 2751-2939; 2941-3156; 3157-3362; 3363-3565; 3567-3765; 3767-3962; 3963-4156; 4157-4377; 4379-4633. Parts 12-15, 20c; Parts 16-23, 25c.)

National Labor Relations act: hearings, 76th Cong., 1st sess., relative to proposed amendments to the National Labor Relations act (eight volumes), supplement. (Washington: House Committee on Labor. 1939. Pp. 83. 15c.)

Profit sharing: hearings, 75th Cong., 3rd sess., pursuant to S. Res. 215, providing for an investigation of existing profit-sharing systems between employers and employees in the United States, November 21 to December 14, 1938. (Washington: Senate Finance Committee. 1938. Pp. 591. 60c.)

Shift schedules in continuous-process industries, including the effects of the Fair Labor Standards act of 1938 upon such schedules. (Stanford University, Calif.; Stanford Univ. Div. of Ind. Rel. 1939. Pp. v, 26.)

Survey of experiences in profit sharing and possibilities of incentive taxation, report of subcommittee to the Committee on Finance, United States Senate, pursuant to S. Res. 215 (75th Congress), resolution providing for an investigation of existing profit sharing systems between employers and employees in the United States. (Washington: Supt. Docs. 1939. Pp. 351. 30c.)

Urban negro worker in United States, 1925-1936. Vol. II. *Male negro skilled workers in the United States, 1930-1936.* (Washington: Interior Dept. Office of Adviser on Negro Affairs. 1939. Pp. 87. 25c.)

Money, Prices, Credit, and Banking

Consumer Credit and Economic Stability. By ROLF NUGENT. (New York: Russell Sage Foundation. 1939. Pp. 420. $3.00.)

This book presents the results of an investigation initiated in 1934 by the Consumers' Advisory Board of the National Recovery Administration and carried on with the support of the Russell Sage Foundation under the direction of Dr. Rolf Nugent, director of the Foundation's Department of Consumer Credit Studies. It is an important contribution to the literature of consumer credit, making available an impressive amount of statistical material in a hitherto neglected field.

In part 1 of the book Dr. Nugent traces the development of consumer credit and of the agencies extending it between 1800 and 1938. The treatment for the early years is necessarily general, but for the years since 1922 a clear and comprehensive picture of the quantitative aspects of consumer credit is for the first time presented. Part 3 is devoted to a detailed study of the sources of data and the methods used in developing estimates of receivables of four general classes of consumer credit agencies: retail merchants, service creditors, intermediary financing agencies and cash-lending agencies. The fullness of the description inevitably suggests grounds for disagreement; but the discussion of data and method will prove extremely valuable to the statistician doing further work in this field and to the economist considering the author's theoretical conclusions.

Repeated warnings are given throughout the book that the estimates for the early years are merely crude approximations and that large potential errors are inherent in the estimates even for recent years. This would appear especially true with respect to the estimates of receivables of service creditors and of the loan balances of cash-lending agencies. The regular use of footnotes to indicate the sources of material and the bases of estimates contained in the 67 tables and charts would have increased the convenience of the book for reference purposes and would have decreased the danger that the figures will be quoted without the warnings and qualifications contained in the text.

Three functional categories of consumer credit are identified. The oldest of these, consumers' deficit financing, is particularly difficult to measure because it represents varying proportions of the receivables of many types of creditors. Dr. Nugent finds that while consumers' deficit financing moves inversely with the business cycle, income-period financing and consumers' capital financing move directly with the business cycle, their move-

ments depending largely on changes in volume of retail sales. Until the late 1920's, credit used for financing consumption between dates when incomes are paid represented the largest category of consumer credit; but consumers' capital financing has increased as a result of competition in the market for consumers' durable goods until it now dominates the aggregate movement of consumer credit, and the cyclical movements of this category of consumer credit appear to Dr. Nugent to be increasing in amplitude.

The theoretical conclusions are to be found in part 2 of the book, "Economic consequences of consumer credit fluctuations." Taking the incomplete utilization of the factors of production as his point of departure, and relying heavily on J. M. Keynes for his theoretical analysis, Dr. Nugent concludes (p. 220) that "the expansion of consumer credit accelerates and prolongs the boom, while its contraction deepens, widens, and prolongs the depression." He urges that control of consumers' capital financing, the most volatile category of consumer credit, is desirable in the interest of stability, and that the control can best be exercised by manipulating the requirements with respect to down-payments and periods of amortization in the installment sales of consumers' durable goods. He looks to the supervision of banks under the federal reserve system, and to the limitation of portfolios of banks to consumer paper which meets requirements fixed by the "system," as the means of stabilizing the outstanding amount of consumer credit. Curiously enough, the author suggests that representatives of consumer financing agencies and of manufacturers of consumers' durable goods participate with the central banking authorities in the formulation of policies for the control of the terms of credit.

The theoretical analysis appears to the present reviewer to have the distortion common to theories of the business cycle in which one of the many elements whose interaction produces the cycle is singled out as being of primary importance. It rests, in any case, upon data which, though by far the most comprehensive thus far produced, are admittedly tentative in character.

HENRIETTA C. JENNINGS

Wheaton College, Massachusetts

Personal Finance Comes of Age. By M. R. NEIFELD. (New York: Harper. 1939. Pp. ix, 324. $3.50.)

"An authoritative and comprehensive statement of the present legal, social and business status of the small-loan business throughout the country." Thus does the jacket of this book describe the publication by the economist for the Beneficial Management Corporation, one of the largest operating units in the so-called small-loan field. Dr. Neifeld has written from the

inside and has presented the most comprehensive study that has yet appeared in this general area of consumer credit. In the main the work is descriptive and historical and presents the subject in such detail as to give a clear picture of this relative newcomer in lending in the United States. It is quite evident that the author is thoroughly convinced of the socially desirable function performed by small-loan companies, so much so that he does not, in the opinion of this reviewer, take proper account of the criticisms that have arisen in connection with lending by small-loan companies. Perhaps this is not a legitimate criticism if Dr. Neifeld is attempting only the task of showing what these companies do rather than of presenting a complete justification for all their practices.

The numerous statistical tables and data bear witness to the author's industry and to his knowledge of the subject he presents. Space permits only a few observations that impress one reviewer as significant and interesting. The typical borrower from a small-loan company is not so much interested in the rate of interest he has to pay as he is in being able to secure, without embarrassment, the money needed (pp. 40-41). As to the rate that should be fixed by law, Dr. Neifeld says that "too low a rate will not attract capital; or . . . too drastic a reduction will cause capital to leave the field open to operators who disregard the law" (p. 52). And yet, in another place he says that "the small-loan operator himself can control, as a matter of management policy through selection of the size of the loan and by elimination of the unprofitable brackets from his operations, where the break-even point shall come and the extent of the profits" (p. 176).

Does this not mean that all those studies made to show what rate of interest is required and what profit results from a given rate (as King's study for New Jersey) are inconclusive because the rate charged determines the clientele that will be served. The fixing of a proper rate becomes, then, it would seem, a sociological problem of determining what borrower is to be accepted rather than the simple financial problem of a rate that will give a reasonable return to capital invested. The lower the rate the more selective the clients served. Dr. Neifeld is first of the authors in this field to admit, by implication, the validity of this view which, if true, makes practically worthless those studies designed to show that a given rate is requisite to the earning of a given return on capital. Along the same line he holds that "when it comes down to the practical matter of comparing operations company by company, the yardstick of price is inadequate. The extent of the service and the degree to which public policy is best served become important accompaniments of a given rate" (p. 88). As to earnings, reports to various banking departments show that for 1936 earnings of small-loan companies, before interest on borrowed and capital funds, were 8.28 per cent on assets used and useful in the business (p. 212).

That competition is not sufficient to bring rates down is apparent when,

as Dr. Neifeld discloses, small-loan company operations fit into the category of "decreasing cost per loan as the volume of loans increases" (p. 204). One method of reducing interest rates, it would appear therefore, is a drastic limitation of the number of companies relative to population served.

The author has a high regard for the capacity of the small-loan companies to adopt self-regulation in the public interest: "To other business and industry went the honor of formulating Code No. 1 [under N.I.R.A.], but to personal finance came the satisfaction that its house was swept and garnished, the lamps trimmed and burning brightly before the clarion call to righteousness had penetrated to those cowering in the economic underbrush" (p. 74). Then, why need regulation by law?

At the risk of appearing to be ungracious in commenting upon a book so packed with useful information, the reviewer expresses regret that the bibliography (not listed as "selective") omits mention of the only serious criticism of small-loan company operations that has appeared in this journal.[1] It also gives no reference to a round-table discussion of this general subject, favorable and unfavorable, at the annual meeting of the American Economic Association in 1930.[2]

CLYDE OLIN FISHER

Wesleyan University

The Pound Sterling: A Study of the Balances of Payments of the Sterling Area. By IMRE DE VEGH. (New York: Scudder, Stevens and Clark. 1939. Pp. vi, 130. Gratis.)

These eight studies of the sterling area, for the years 1931-38, are a bold innovation in the field of special-area balances of payments. That type of study was originated by Dr. Rufus S. Tucker, in his tables of payments between the United States and each continent; see the Commerce Department's pamphlet, *Balance of International Payments of the United States in 1934.*

Five years later the special-area idea was advanced to cover payments between two countries. A study of payments between the United States and the United Kingdom during 1928, by the reviewer, first appeared in *Commerce Reports,* published by the Department of Commerce. A year later Professor Ralph Young did a similar study for that weekly.

A Franco-American balance of payments, by the reviewer, appeared in *The Annalist,* November 8, 1929. A Japanese-American study, by Herbert M. Bratter, will be found in *Commerce Reports,* January 19, 1931. An annual series of Canadian-American studies, by Herbert Marshall

[1] C. O. Fisher, "Small Loans Problem: Connecticut Experience," *Am. Econ. Rev.,* June, 1929, pp. 181-197.

[2] "The Small-Loan Business," *Am. Econ. Rev. Suppl.,* March, 1931, pp. 11-26.

of the Dominion Bureau of Statistics, was begun at about that time; Mr. Marshall's able work was the principal base of a study by the Carnegie Peace Foundation. When George N. Peek was special adviser on Foreign Trade, around 1935, special-area studies of payments between the United States and each of numerous countries were made; these, however, were but indifferently done and received little attention.

Colonial studies began with a highly enlightening survey of payments between the United States and the Philippines by Dr. Tucker in the *Harvard Business Review,* October, 1929. Official surveys of payments between The Netherlands and its principal colony were begun about three years ago.

Mr. de Vegh's report must be noted by every student of balances of payments, if only to appraise the results of serious research with a new concept. Those results seem, however, rather thin. Definite conclusions, adduced from the new balances of payments, are few. De Vegh is commendably cautious in his reservations.

The author displays impressively broad and detailed knowledge of international dealings in recent years. Especially valuable is his report on the Exchange Equalization Account of the Bank of England (pp. 90-99). In later pages he lists reasons for concluding—not directly from his statistics—that "weakness and dangers . . . combine to make the pound sterling a very poor risk" (p. 111). "A stoppage of gold purchases by the United States Treasury . . . would precipitate a major crisis in the position of the pound" (p. 110).

De Vegh's method of bulking the international payments of 12 countries, identified as within the sterling area, seems dubious. A balance of payments must have a definite period and a sharp area. And the sterling area has but vague boundaries. The "full sterling-reserve" countries seem definite enough (p. 8); but some of the countries "holding sterling reserves" are in a changing twilight zone. (The omission of Greece from the latter group is a minor oversight.) At most, should not the author have confined his studies to the "full sterling-reserve" area?

De Vegh counts new gold production as a balance-of-payments credit (pp. 19, 21, and 28-9). Gold does possess "unlimited marketability" (p. 18), and it is the very sinew of sterling exchange; but should it enter any balance of payments until it has left the producing country or been earmarked there? Would it not have been better to exclude new gold production from the tables but cover it in detail in the text? As regards one important gold-producing country (Canada), the reviewer finds that, marginally, gold strongly tends "to follow the loan." If this should be found true of South Africa, also, new gold production can be counted upon for sterling support only guardedly.

Ray Ovid Hall

Washington, D.C.

NEW BOOKS

ARNDT, E. H. D. *The South African mints.* Pubs. ser. no. iii, arts and soc. sci. no. 9. (Pretoria: Univ. of Pretoria. 1939. Pp. vi, 115. 3s. 6d.)

CONOLLY, F. G. *Reflections on the cheap-money policy, particularly in England.* Suppl. to Svenska Handelsbanken's *Index,* Oct., 1939. (Stockholm: Svenska Handelsbanken. 1939. Pp. 20. 1 krona.)

DUTT, S. N. *The economics and law of central banking.* (Calcutta: Chuckervertty Chatterjee. 1939. Pp. 26. 6 annas.)

EMDEN, P. H. *Money powers of Europe in the nineteenth and twentieth centuries.* (New York and London: Appleton-Century. 1938. Pp. xii, 428. $3.50.)

The money powers are bankers and banks. No one receives enough attention to arouse deep interest or real understanding. The arrangement is neither logical nor chronological. The chapters are rambling notes from books read but only partly digested. Many tales are started; none are finished. There is no thesis and no pattern.

N. S. B. G.

FOSTER, W. T. *Loan sharks and their victims.* Public affairs pamph. no. 39. (New York: Public Affairs Committee. 1940. Pp. 31. 10c.)

GILBERT, M. *Currency depreciation, 1929-1935.* A dissertation. (Philadelphia: Univ. of Pennsylvania. 1939. Pp. xiii, 167.)

GRAHAM, F. D. and WHITTLESEY, C. R. *Golden avalanche.* (Princeton: Princeton Univ. Press. 1939. Pp. xv, 233. $2.50.)

GRAHAM, M. K. *A handbook of monetary theory.* (Nashville: Parthenon Press. 1939. Pp. 78.)

Mr. Graham states in his foreword that because of their rich and varied information the essays in Professor Arthur Gayer's *Lessons in Monetary Experience* should be abstracted for clarification and study. An abstract for Graham's own use is here offered to assist others in comprehending this valuable compilation of monetary essays. As with most abstracts, the condensation of material covering many pages in the original results in some ambiguities, although on the whole Mr. Graham's abstract is clear and will prove especially helpful to graduate students.

WILLIAM WITHERS

HELMS, L. A. *The contributions of Lord Overstone to the theory of currency and banking.* Stud. in the soc. sci., vol. xxiv, no. 4. (Urbana: Univ. of Illinois Press. 1939. Pp. 142. $1.50.)

HOLGATE, H. C. F. *The contingent liabilities of the English commercial banks.* (London: Gee. 1939. Pp. viii, 77. 5s.)

JAMES, F. C. *A colloquy on branch banking: contemporary questions and answers.* (New York: Am. Economists Council for the Study of Branch Banking. 1939. Pp. 28. Gratis.)

KAMP, M. E. *Die geldliche Wechsellagenlehre: Darstellung und Kritik der geldlichen Wechsellagentheorien von Hawtrey, Wicksell und Hayek.* (Jena: Fischer. 1939. Pp. 143. RM. 4.50.)

LESTER, R. A. *Monetary experiments: early American and recent Scandinavian.* (Princeton: Princeton Univ. Press. 1939. Pp. xvii, 316. $3.50.)

LINDAHL, E. *Money and capital.* (London: Allen and Unwin. 1939. Pp. 391. 10s. 6d.)

MÜHLENHOFF, H. *Die englische Währungsabwertung und die wirtschaftlichen Wechsellagen.* (Jena: Fischer. 1939. Pp. viii, 136. RM. 5.)

ROSE, M. and HORNE, R. L. *Money.* Rev. ed. (Chicago: Univ. of Chicago Press. 1939. Pp. 43. 25c.)

SCHNEIDER, F. P. *Zur Theorie der Goldwährung.* (Jena: Fischer. 1939. Pp. viii, 176. RM. 7.50.)

STEFFEN, R. T. *Cases on commercial and investment paper.* (Chicago: Foundation Press. 1939. Pp. 965. $6.)

THORNTON, H. *The paper credit of Great Britain.* Edited by F. A. VON HAYEK. (New York: Farrar and Rinehart. 1939. Pp. 368. $3.50.)

This volume is a reprint of Henry Thornton's famous *Enquiry into the Nature and Effects of the Paper Credit of Great Britain,* first published in London in 1802. In addition to the *Enquiry,* the volume contains three appendixes, the first presenting the evidence of Henry Thornton before committees of secrecy of both Houses of Parliament on the Bank of England, March and April, 1797. Appendix 2 consists of some of Thornton's manuscript notes on the Bank restriction (1804) ; and the last appendix comprises two speeches by Thornton on the Bullion report, in 1811.

So much for the reprints. The publishers secured the services of F. A. v. Hayek to edit the volume, and Hayek's introduction of some 63 pages adds materially in the interest of the book. The introduction is biographical in character, the first part describing the man Thornton, his inheritance and his environment, the second section dealing more largely with Thornton's work and the value of his contributions. Some excellent bibliographical notes are also appended to the introduction.

The publishers are to be congratulated in undertaking the reprinting of this and other outstanding early works, now out of print and difficult to obtain. Through this undertaking, known as "The Library of Economics," students will be enabled at a moderate price to possess their own copies of the more famous books and studies of these brilliant early economists.

FREDERICK A. BRADFORD

WATKINS, L. L. *Commercial banking reform in the United States, with especial reference to the 100 per cent plan and the regulation of interest rates on bank deposits.* Michigan bus. stud., vol. viii, no. 5. (Ann Arbor: Univ. of Michigan Bur. of Bus. Res. 1938. Pp. 133. $1.)

This monograph is divided into two parts, the first dealing with programs of regulation and reform, and the second with the regulation of interest on deposits. The bulk of part 1 is taken up with an analysis and appraisal of the 100 per cent reserve plan. Professor Watkins considers a number of plans coming under this general head, subjects them to analysis and criticism, and finally concludes that a compromise system is probable.

The second part constitutes a well-rounded discussion, including historical background, of the regulation of interest on bank deposits, and contains some acute suggestions on the part of the author in respect to the possibility of credit control through alterations in such interest rates by the regulatory authority.

Perhaps the most pertinent criticism of this interesting study, and a relatively minor one, is that the title is too comprehensive. A number of significant phases of commercial banking reform are not considered or are mentioned only cas-

ually. Those aspects which are treated, however, have been covered in thorough and satisfactory fashion.

FREDERICK A. BRADFORD

WESTERFIELD, R. B. *Commercial banking attitudes toward federal savings and loan associations.* (Chicago: U. S. Savings and Loan League. 1939. Pp. 20.)

WILCOX, F. E. *A statistical study of credit unions in New York.* (Chicago: Univ. of Chicago School of Business. 1940. Pp. ix, 91. $1.)

WOOD, E. *English theories of central banking control, 1819-1858, with some account of contemporary procedure.* Harvard econ. stud., vol. lxiv. (Cambridge: Harvard Univ. Press. 1939. Pp. xiii, 250. $5.)

Silver Purchase act: hearings, 76th Cong., 1st sess., on S. 785 bill to repeal the Silver Purchase act of 1934, to provide for the sale of silver, and for other purposes. (Washington: Senate Banking and Currency Committee. 1939. Pp. 150. 15c.)

Public Finance, Taxation, and Tariff

The Federal Income Tax. By ROY G. BLAKEY and GLADYS C. BLAKEY. (New York: Longmans Green. 1940. Pp. 650. $7.50.)

In this work, the long labors of Professor and Mrs. Blakey on federal taxation reach a fitting climax. Those numerous articles in the *Review* and indeed all else that they have written seem but preparation for this, the real task ahead. To it, they brought not only academic preparation, but the experience gained by Professor Blakey during several years in Washington and enriched by many contacts with legislators and administrators. Secretary Cordell Hull, who, in the words of Professor Blakey, "has probably done more than any other living man to establish and develop a good income tax in the United States" was particularly interested and helpful. Indeed, it seemed probable at one time that he would collaborate in writing the book. Judge William Green, for a long period Chairman of the Ways and Means Committee, is also credited with giving much assistance. Several prominent tax administrators are also mentioned as being helpful.

The book itself includes twenty-four chapters. The first traces the origin of the movement for an income tax, and the second discusses the corporation excise tax of 1909 and the sixteenth amendment. These are followed by eighteen chapters, each treating a revenue act, or the tax measures of an act bearing another title, and discussing any controversies that may have arisen in connection with it. In this way the issues of excess profits, estate, and undistributed profits taxation are included. The next three chapters deal with the special problems of the evolution of the definition of taxable income, rates and exemptions, and administration. The last chapter undertakes an evaluation of the income tax. Supporting references are numerous throughout the text and an extensive bibliography is attached.

The treatment is in the historical emphasis. Thus the income tax is

viewed not as a finished instrument of revenue, but as one in process, shaped by many influences. The economic and social setting, the political issues, the debates in Congress, the work of committees, the decisions of judges, and the task of administration all find a place in the pages of this book. The discussion is often illuminated—and most effectively—by side lights. Thus in locating the origin of the movement for an income tax, the state of residence of each member of Congress introducing a bill for an income tax is given. The influence of Secretary (then Representative) Hull's study of British income tax is shown in the first draft of the income-tax law of 1913 which he prepared. Side lights of a different kind are given by well-chosen quotations from newspapers, political speeches, biographies, and by occasional characterizations of leading figures in the events described. The facts behind the facts are not neglected. Here is no dry tale of tax changes but living history.

The reviewer was particularly impressed with the first two chapters, which treat the origin and beginning of income taxation. They trace the way from a movement arising out of social and economic conditions in the West and South to a statute of Congress and an amendment to the Constitution, and make of it a story at once convincing and interesting. The next eighteen, the body of the book, may be characterized as an excellent history of the operations of the income tax. The last four chapters attract the student of taxation because of the broad issues that they examine in the light of the preceding historical material. The answers are, as would be expected from the treatment, in the historical emphasis.

This book bears the marks of solid, painstaking scholarship. But it was written for the reader. The sentences and paragraphs used yield clear meanings. The numerous tables and charts included are used effectively. And the result is not only instructive but interesting. In short, here is a work of outstanding quality.

M. SLADE KENDRICK

Cornell University

The Treasury and Monetary Policy, 1933-1938. By G. GRIFFITH JOHNSON, JR. Harvard Univ. Dept. of Govt. ser. (Cambridge: Harvard Univ. Press. 1939. Pp. 230.)

Entering office at the nadir of the depression, the public in a tragic state, the Roosevelt Administration, with a mandate from the people to "save them," chose to take first, for the way out, what were considered extraordinary measures in the money and banking field. But in this area there had been nurtured the tradition that politics and money should be kept apart, that credit control was something to be reserved for an independent, non-political agency. This, indeed, was a paradoxical situation in a sup-

posedly democratic country, where even the highly-prized and much-worshipped Constitution gave Congress the explicit power "to coin money and regulate the value thereof."

Strangely enough, the restoration of confidence was immediately sought by departing from that supposed bulwark of confidence—the gold standard. To those who may be sceptical, it would seem that the author offers convincing testimony that there is no sanctity in the gold standard; that it is but a means to an end, and has been so treated by other nations when it stood in the way of desired goals. Dr. Johnson offers no encouragement to those who yearn for the restoration of gold, arguing that such a step would be futile under the existing disequilibrium, and advocates, as an alternative, coöperation among the exchange funds.

Following an analysis of the gold policy, the author takes up in turn the most important channels through which the Treasury's power has been exerted—the stabilization fund, gold sterilization, and the silver purchase program. But it is emphasized that subsequent events and policies were largely shaped "by the revaluation of the dollar, as a result both of the fixation itself in terms of gold and of the level of fixation." There are traced in considerable detail these monetary policies and their consequences.

The pivotal decisions respecting monetary policies have been made not by the Treasury Department but by the President. This is stated to be due not only to the American governmental set-up, but to the immense personal and political prestige of Roosevelt. In handling most of the monetary policies, the Administration possessed an extraordinary amount of discretion. Congress delegated to the Executive not merely almost complete discretion in actual operations, but the power to make fundamental policy decisions. The criteria by which the newly acquired powers were to be exercised were largely the conceptions of "the public interest" held by the President and his associates.

Dr. Johnson's work shows clearly how the government took control of central banking powers out of private hands and placed it with its own agencies. This intrusion upon the functions of the federal reserve system as it had been operated is due to its close relationship to private business and finance. The Administration chose not to risk the implementing of its social objectives by the privately owned and operated reserve banks. In contrast with the financial power working through the New York Reserve Bank, the source of dominance of the Administration's power in monetary affairs has been the national community. Policies were launched, organizations created and techniques undertaken deliberately for the furthering of the well-being of the nation. Why should monetary policy ever have been left to the control of individuals outside the political framework of government—to, for example, the Federal Reserve Bank of New

York? The Roosevelt Administration undertook to achieve recovery not merely through monetary instruments but by comprehensive fiscal programs. Upon the present state of complexity and interdependence in our social order are thus piled a maze of intricate and subtle threads of money, credit, and finance, the vast influence of which is evident with profound consequences for the future.

In the new order of things, Dr. Johnson holds that the broad socioeconomic problems facing the country purporting to be a democracy are properly subject to parliamentary direction and executive control, that the monetary and fiscal problems are necessarily bound up with them, and that the solution of them all definitely rests with the government. There are dangers in the political management of money and credit to be sure, but these are considered relatively insignificant in view of the breakdown of capitalistic democratic economy. The work is a good descriptive and analytical survey of the development of monetary policies during those years of rapid change. In organization and balanced judgment, it leaves little to be desired. Although the author allows no doubt of his preference for democracy and of his desire to maintain democratic controls, he admits that this is one of the important problems awaiting solution in the future.

LAWRENCE CLARK

Hunter College

State and Federal Grants-in-Aid. By HENRY J. BITTERMANN. (New York: Mentzer Bush. 1938. Pp. x, 550. $4.00.)

Although Professor Bittermann does not claim to have given a definitive treatment of the subject of state and federal grants-in-aid, his book easily ranks as the most comprehensive study that has yet been made in the United States. It is essentially an analytical inquiry into the use of the subvention from the standpoints both of finance and administration. The importance of such a study is apparent from the fact that the annual expenditure for grants-in-aid now approximates a billion dollars, while the states "expend about a fourth of their revenues in this way." Federal grants have come into much prominence recently because of the broad and extensive relief program, yet state subventions have occurred over a much longer period and have been, in the main, of much greater fiscal significance.

The grant-in-aid, as used by Professor Bittermann, is a subsidy from a higher to a lower order of government "to defray part of the cost of a service administered by the local authority." The central government usually imposes certain restrictions or conditions under which funds must be administered. The purpose of subsidies has been primarily to improve the standard of local services or to effect a given minimum of efficiency, though not to reduce the standards of all localities to the same level of

equality. Thus the grant-in-aid has proved a powerful lever by which to force local government officials who are indifferent to the needs of the community, to accept standards that are set by the central government. Failure to do so may mean the loss of subsidies and an increase in local tax rates. While states have the option of using other fiscal devices, such as the sharing of taxes with localities or permitting additional rates to be imposed, the federal government, except for powers expressly granted by the constitution, is, in the promotion of national policy, more definitely limited to the use of grants-in-aid. In the main, however, federal subventions are of much more recent origin than those of the states.

The two main activities in which American state governments have made direct grants to local governments are schools and highways. Public school systems were established as a result of financial assistance derived from state surplus revenues and from federal land grants. Frequently also state constitutions have provided that receipts from specified sources of revenue should be appropriated to the public schools. There has been a notable rise in per capita grants-in-aid for schools during recent decades, especially in those states whose tax sources are independent of local revenues. During the nineteenth century, the maintenance of highways fell almost entirely to local administration and finance. This policy was greatly changed when new sources of revenue were discovered through levies on motor vehicle and motor fuel taxes. For all purposes state subventions reached a total in 1932 of $618,587,000. Following this year, relief became an important item in state contributions, while since 1937 it has been necessary to provide funds for the social security program. Thus "estimating state expenditures as approximately $2,200,000,000 annually and local revenues as about four and a half billions, it may be inferred that grants-in-aid have in recent years represented about 45 to 50 per cent of state expenditures and from 18 to 20 per cent of local revenue receipts." The aggregate of federal grants for highways, public health, the improvement of agriculture, extension teaching, vocational education and other purposes, increased from $2,703,000 in 1902 to $238,068,000 in 1932. Such grants had a phenomenal rise in 1933 and the years following, as a result of the federal relief program, and it may be said that not only have the "traditional methods of public finance and administration been greatly modified," but also even if abandoned, federal relief activity has greatly affected the relations of the national government with the states and of state governments with local affairs.

Professor Bittermann is to be highly commended for the objective and scientific appraisal which he has made of the grant-in-aid as a fiscal device. He readily admits that this device is not the sole or entire solution of the problems of local governments, but holds that both federal and state subventions may be used to stimulate inferior governments to conform with

given standards or to undertake new services. A program of reform may be facilitated when opposition would be offered to direct control by a central authority. The author feels that an extension of grants to include new services might well be made, especially in the fields of public health, social security, and general education. It might even be advantageous for the states to aid the municipalities in the more debatable realm of crime control and police work. One may agree with Professor Bitterman's final conclusion that the grant-in-aid "is the most practicable way of reëstablishing an equilibrium between central and local finance."

TIPTON R. SNAVELY

University of Virginia

German Financial Policies, 1932-1939. By KENYON E. POOLE. Harvard econ. stud. 66. (Cambridge: Harvard Univ. Press. 1939. Pp. xiv, 276. $3.50.)

The purpose of this study is to analyze the financial aspects of Germany's attempts to raise production and employment above the low levels of 1931. The author makes no attempt to cover all phases of economic life. In particular, he passes over the international side of the question, on the ground that proper treatment would require a separate volume. Obviously his interest in the monetary and financial repercussions of a public expenditure policy is deep and thorough-going, and his acquaintance with the conclusions of others is sufficiently wide. No approval or disapproval of a "political" nature appears in the text and no speculation as to the future of the German economy in war-time conditions has been permitted to appear.

The writer himself puts emphasis upon the sequence of the four chapters. Chapter 1 deals with recovery measures precedent to the public works programs, and attempts to show that despite the apparent failure of Brüning's and Papen's measures a groundwork was laid for greater success under Hitler. Papen's tax remission plan, decreed on September 4, 1932, has been called a failure because it did not measurably raise the volume of employment and production. But it was unnecessarily complicated and it was not given a thorough trial. It may still be argued that such a scheme has advantages, given careful provisions and favorable conditions. In conclusion, we are reminded that an important advantage of tax remission over public works is that, while the latter involve management by the state, tax remission, once started, operates automatically and encourages the government to remain within its traditional functions.

Under the title, "The financing of the upswing, 1932-1939," the hundred-and-some pages of chapter 2 include discussion of the methods open to the German government, the financing of public works, the part played by the intricate banking mechanism, the Reich public debt, and the

ultimate financing of recovery. Here is information, argument and conclusion that any reader should welcome for his intellectual background in these troubled times. The story of Schacht's rebellion against hidden or overt inflation is told. The process of financing to some extent public works out of the wages of workmen and the salaries of white-collar workers is described. When credit expansion is to be avoided, "the operation really consists in drawing off part of nominal wages and salaries, and paying them out again, so that the quantity of money impinging on the price level is smaller than it seems" (page 162). The dangers of making no allowance for the fact that it has never yet been possible to maintain uninterruptedly an unbroken increase in production are pointed out.

After a digression of eight pages on taxes on profits in relation to the business cycle, the author reverts to the theme of the effect of civil public works on industry. An analysis of construction and other important industries indicates that difficulties may arise if one or two are selected, depression after depression, for government support. At the end doubt is expressed whether we can yet get close enough to laboratory conditions to trace very far the repercussive effects of government expenditures on a nation's economy.

The honesty of this expressed doubt as to the universality of some of the conclusions detracts not one whit from the value of this careful study. For the general reader it may lack the unity of thought that is so apparent to the writer; it may lack as well the non-technical complexion that pleases the publishers. It remains a valuable historical record and a clear exposition of problems for which students will not stop trying to find solutions.

ALZADA COMSTOCK

Mount Holyoke College

NEW BOOKS

ANDREADES, A. M. *Begründer der Finanzwissenschaft in Griechenland.* (Jena: Fischer. 1940. RM. 13.50.)

BLACK, D. *The incidence of income taxes.* (London: Macmillan. 1939. Pp. xxi, 316. 12s. 6d.)

BOWEN, H. R. *English grants-in-aid: a study in the finance of local government.* Stud. in soc. sci., vol. xi, no. 1. (Iowa City: Univ. of Iowa. 1939. Pp. 156. $1.)

FRIEDRICH, C. J. and MASON, E. S. *Public policy: a yearbook of the Graduate School of Public Administration, Harvard University.* (Cambridge: Harvard Univ. Press. 1940. Pp. xiii, 391. $3.50.)

HALL, J. K. *A study of probated estates in Washington with reference to the state tax system.* Pubs. in the soc. sci., vol. 11, no. 1. (Seattle: Univ. of Washington. 1939. Pp. v, 56.)

This is a study of the distribution of estates, and more particularly their composition in the forms of realty, tangible personalty, and intangible personalty. Data for the years 1928, 1933, and 1935 were obtained from six Washington counties by the Washington Tax Commission.

The purpose is to develop tax implications in terms of the existing state and local tax system chiefly by: (1) determining the relative importance of realty, tangible personalty, and intangible personalty; (2) ascertaining the nature of their distribution in relation to size of estates; (3) finding the distribution of representative and non-representative intangibles in intangible personalty; and (4) establishing a breakdown of intangible personalty into its important types.

It is stated (pp. 7, 10) that the 7,992 estates "subject to analysis" represent all estates probated during the three years, yet it seems unusual that all estates probated were also inventoried. Hall relies too heavily on probate records as a source of accurate data on distribution of property among living persons. Moreover, shortcomings of inventory appraisals as a basis for determining precisely the relative distribution of realty, tangible personalty, and intangible personalty are not fully explored. The findings, however, compare approximately with results of six similar studies and the Federal Trade Commission survey.

The relative importance of realty, tangible personalty, and intangible personalty in all counties for the three years is 39.67, 3.29, and 57.04 per cent respectively. Intangibles are subject neither to property nor income tax in Washington.

The larger the estate the greater the proportion of intangible property found in it. In estates of $100,000 and above, 77.63 per cent of property held consists of intangibles. Holdings of federal, state, and local securities are relatively small, even in large estates.

Of all estates, 82.27 per cent were valued at less than $10,000 and these held only 26.21 per cent of total property value, and 16.56 per cent of total intangible personalty, but 38.29 per cent of total realty.

Realty comprises over half the value of properties in rural estates as against 38.48 per cent for urban estates.

Conclusions are that the tax system is regressive, unequal in burden, fails to touch intangibles, and relies excessively on sales and excise taxes. The property tax falls entirely on 42.96 per cent of total property. This statement of exact percentage seems a bit unguarded. Finally, Hall suggests that a net income tax (Washington has none) is the most effective method of taxing intangible personalty yet devised.

This monograph, despite criticisms made above, constitutes a contribution to the literature of wealth distribution and that of taxation.

Roy C. Cave

Hazelett, C. W. *Incentive taxation.* Rev. and enl. ed. (New York: Dutton. 1939. Pp. 202. $1.50.)

Hope-Jones, A. *Income tax in the Napoleonic wars.* (London: Cambridge Univ. Press. New York: Macmillan. 1939. Pp. x, 145. $2.25.)

Johnson, G. G., Jr. *The Treasury and monetary policy, 1933-1938.* (Cambridge: Harvard Univ. Press. 1939. Pp. 239. $2.75.)

Kilpatrick, W. *State supervision of local budgeting.* (New York: Nat. Municipal League. 1939. Pp. 131. $1.)

Krout, J. A., editor. *The effect of the war on America's idle men and idle money.* Proc., vol. 18, no. 4. (New York: Acad. of Pol. Sci., Columbia Univ. 1939. Pp. 133. $2.50.)

Lasser, J. K. *Your income tax.* 1940 ed. (New York: Simon and Schuster. 1939. Pp. 125. $1.)

NEFF, F. A. *Municipal finance, with emphasis on trends since 1900.* (Wichita, Kansas: McGuin Pub. Co. 1939. Pp. xii, 330. $3.)

The rapid and widespread growth of urban life especially since 1900 has brought about financial needs out of proportion to the increase in population and the income from the usual sources, not so much because ". . . the same service costs more as cities increase in size as it is that more and better services are demanded from communal enterprises and municipal administration" (pp. 4-5). Main causes of increasing expenditure are: (1) area and population growth; (2) expansion of functions; and (3) intensification of services in education, health, and charities (p. 63).

The traditional line of reasoning that relates the level of expenditure to the main source of income, *i.e.*, the general property tax, is not applicable when this level bears a close relationship to a socially desirable end. Where rate limitation, debt limitation, and the pay-as-you-go plan exist, the underlying thought has been to encourage prudent and efficient management. When they succeed in curtailing worth-while services, however, they are no longer good regulatory devices.

The prospect apparent now is that continual grants of various kinds are necessary if the standards of service shall continue on their present level. This practice would place our municipalities more on a plane with European cities where substantial grants from the national government are the rule. A good financial plan will fail to be successful unless there is a sincere desire to promote efficiency and economy through a sound budgetary process. A flexible budget which allows some administrative discretion in the transfer of funds is thought to be superior to the lump-sum and the detailed budgets.

Long absent from recent books on public finance is the "single-tax" idea, which the author considers worthy of examination in connection with an attempt to find new ways to meet the enlarging financial needs of municipalities.

The topic of assessment is ignored although it partially conditions the yield of the various tax levies. The unsatisfactory result of poor assessment is noted (p. 98), but dismissed without further comment.

ROYAL JAY BRIGGS

NEWCOMER, M. *You are a taxpayer.* (Poughkeepsie: Vassar Coll. 1939. Pp. 37. 60c.)

STRAYER, P. J. *The taxation of small incomes: social, revenue, and administrative aspects.* (New York: Ronald. 1939. Pp. viii, 210. $3.)

The fruitfulness of research in taxation by economists is apparent in this interesting monograph on the problem of taxing small incomes. With American governments in urgent need of more tax revenues and the frequent advocacy of a broader income-tax base, while the nation has been suffering from a prolonged depression and millions of families have very low incomes, the possible taxation of low incomes becomes of more social as well as fiscal significance.

The author presents a strong case for the exemption of incomes below the subsistence level from income taxation but contends that direct income taxes upon the moderate incomes are preferable to excises and other indirect taxes because the income tax is more equitable and will promote better citizenship by securing a greater consciousness of taxation and a better understanding of the relation of government spending to taxation. Professor Strayer joins earlier

writers not only in advocating the exemption of a minimum of subsistence but also in urging effective progression throughout the tax system by a gradual process which would place more reliance upon the personal income tax. It may be placed advantageously upon moderate incomes, as long as the level of subsistence income is not taxed, and produce $200,000,000 or more revenues for the federal government.

The difficulties involved in an effort to define subsistence income are frankly admitted, but they need not preclude the exemption of a minimum which would lend itself to convenient measurement by selecting an arbitrary, if necessary, but reasonable, minimum income. The fiscal advantages and disadvantages of the proposal are freely admitted, and it is conceded that a broadening of the personal income-tax base might increase the instability of the tax collections. A larger use of progressive personal income taxation is proposed primarily as a revenue reform which will heighten public revenues and apportion their burdens more equitably, but the tax system would also be employed to lessen the evil effects of the extreme poverty at the bottom of the income scale.

ALFRED G. BUEHLER

SULLIVAN, J. *The reform of the rating system.* Res. ser. no. 47. (London: Fabian Society. 1939. Pp. 30. 6d.)

THOMAS, P. J. *The growth of federal finance in India: being a survey of India's public finances from 1833 to 1939.* (Bombay and New York: Oxford Univ. Press. 1939. Pp. xi, 558. $7.75.)

WALK, E. G. *Loans of federal agencies and their relationship to the capital market.* A dissertation. (Philadelphia: Univ. of Pennsylvania. 1939. Pp. 256.)

WINSLOW, C. M. and CLARK, K. R. *Profit sharing and pension plans: their creation and tax effect.* (Chicago: Commerce Clearing House. 1939. Pp. 205. $2.)

WITHERS, W. *Financing economic security in the United States.* (New York: Columbia Univ. Press. 1939. Pp. x, 210. $2.75.)

Assessment principles: final report of the Committee on Principles of Assessment Practice. Rev. ed. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 106. 75c.)

Assessment of real property in Kentucky counties: comparison of constitutional assessments and actual county assessments. Spec. rep. no. 3. (Frankfort: Kentucky Dept. of Revenue. 1939. Pp. 69.)

Exemption and preferential taxation of factories. Bull. no. 24. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 13. 50c.)

Exemption and preferential taxation of homesteads. Bull. no. 20. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 15. 50c.)

Internal revenue code: an exact reprint of the internal revenue code as amended by the Revenue act of 1939. (New York: Prentice-Hall. 1939. Pp. 764. $2.50.)

Internal revenue code, 1939. (Washington: Treasury Dept. 1939. Pp. 504, ccxxxix. $1.75.)

The tax law as it relates to the assessment and taxation of real property (Articles 1-8). Vol. xxiv, no. 5. (Albany: N. Y. State Tax Bull. 1939. Pp. 129.)

The tax law as it relates to the duties of assessors in assessment of real property for taxation (Articles 1-2). Vol. xxiv, no. 6. (Albany: N. Y. State Tax Bull. 1939. Pp. 35.)

The village law relative to assessment of real property, collection of taxes thereon, and sale of land or liens for unpaid taxes (applicable to villages operating un-

der the general village law) (Article 5—finances). Vol. xxiv, no. 8. (Albany: N. Y. State Tax Bull. 1939. Pp. 44.)

Personal income tax law of New York (Article 16 of the tax law) and tax on unincorporated businesses (Article 16A of the tax law) with 1939 amendments. Manual 39-A. (Albany: N. Y. State Income Tax Bur. 1939. Pp. 54.)

Prentice-Hall tax diary and manual for business, 1940. (New York: Prentice-Hall. 1939. Pp. 1044. $6.)

Property taxation of intangibles. Bull. no. 21. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 13. 50c.)

Retailers' manual of taxes and regulations. 1939 ed. (New York: Inst. of Distribution. 1939. $5.)

Revenue revision: hearings, 76th Cong., 1st sess., relating to revenue revision, 1939. (Washington: House Ways and Means Committee. 1939. Pp. 284. 25c.)

Statistics of income for 1937, preliminary report of corporation income and excess-profits tax returns filed through Dec. 31, 1938. (Washington: U. S. Bur. of Internal Revenue. 1939. Pp. 18. 5c.)

War-time finance: its effects upon national stability. (Manchester: Fed. of Master Cotton Spinners' Assoc. 1939. Pp. 32.)

Population and Migration

The Economics of a Declining Population. By W. B. REDDAWAY. (New York: Macmillan. 1939. Pp. 270. $2.50.)

This is not a volume on population, but rather an exercise in theory as to the economic effects of changes in the size and age-composition of the population of England and Wales. The author is a Fellow at Clare College, Cambridge. He bases his treatment on the estimates of Dr. Enid Charles (in Lancelot Hogben, ed., *Political Arithmetic,* George Allen and Unwin, 1938) that "unless unforeseen social agencies intervene to raise fertility," the total population of England and Wales will decline from around 40 million in 1935 to about 20 million (estimate "a") or even as low as 5 million (estimate "b") in 2035. The first estimate is based on the assumption that fertility and mortality rates will remain the same as in 1933, the second that both rates will continue to decline in much the same way as they have done in the past. However, he deals mainly with the near future in which the population will decline only slightly, and refuses to analyze "the nightmare conditions which would prevail in 2035 if Dr. Charles's second estimate were fulfilled" on the grounds that "society simply must prevent their existence."

Population prediction is a hazardous occupation, and a common error is to assume that a present rate will remain unchanged. The significant facts of the present situation are the declining rate of increase of the total population (a natural and inevitable phenomenon under certain conditions) and an aging, both absolute and proportionate, of the population, owing to the increased expectation of life as a result of the advance of medicine and public health and the declining birth rate made possible by contra-

ception. The population pyramid is losing its broad base. In the United States (1930) there are fewer children under 5 than between 5 and 10 years of age. In England and Wales (1931), there are fewer children in the 0-5 and 5-10 age groupings than in that of 10-15 years. American population students are predicting a stationary population in the not-distant future. Dr. Charles is more pessimistic (and rash) in estimating an actual and catastrophic decline for England and Wales.

I am not competent to criticize Mr. Reddaway's economic theorizing. So far as I am concerned there are so many variables and so many unknowns that the procedure rapidly loses all contact with reality. Be that as it may, he regards the economic outlook for the near future (considering mainly employment, national income, public finance, and international trade), as at least potentially favorable. There are, however, two overriding provisos: that (1) general unemployment and (2) war can be avoided. It is probably unfair to quote him (that is the risk all prophets run), but on page 198 he states (the preface is dated March, 1939): "Indeed, a major war would simply make our whole discussion of public finance (if not the whole of this book) virtually irrelevant." Nevertheless, much that he says regarding such matters as the aging of the population is practical and pertinent.

MAURICE R. DAVIE

Yale University

NEW BOOKS

FAIRCHILD, H. P. *People: the quantity and quality of population.* (New York: Holt. 1939. Pp. 315. $2.25.)

VON FRANGEŠ, O. *Die Bevölkerungsdichte als Triebkraft der Wirtschaftspolitik der südosteuropäischen Bauernstaaten.* (Jena: Fischer. 1939. Pp. 32.)

THOMPSON, E. T., editor. *Race relations and the race problem: a definition and an analysis.* (Durham: Duke Univ. Press. 1939. Pp. xv, 338. $3.50.)

This group of essays attempts to set the race problem of the United States, especially the negro problem, in a broad setting of theory of race relationships and an analysis of conditions affecting struggles of races for land and status. No new material is presented; but the focussing of interpretation upon the single racial situation with side glances at the Oriental in the Western States gives peculiar potency to contributions of the authors.

The theoretical bases of the discussion are set forth in the consideration by R. E. Park of "The nature of race relations." Statistical material about the racial balance of births and deaths is analyzed by S. J. Holmes. The foundations of traditional race relationships in the South are found in the plantation which seems to be synonymous with the system of chattel slavery. The two castes in the South coterminated by race and classes within those castes, primarily the mulatto, is the theme of two essays. Racial conflict and competition furnish material for four discussions.

Two characteristics the essays have in common: each is quite readable and each aids in achieving the purpose of the volume "to organize a discussion of

race relations with special reference to the South in such a way as to throw emphasis upon the relations rather than upon a particular race" (p. ix). The book should be of value to any reader who is interested in getting within the scope of one volume a survey of the "race problem" in its sociological and economic setting within the United States.

RUTH A. ALLEN

VINCI, F. *Problemi demografici.* (Bologna: Zanichelli. 1939. Pp. vi, 228. L. 20.)

WHELPTON, P. K. *Needed population research.* (Lancaster: Science Press. 1938. Pp. xv, 196. $1.)

With the aid of the Milbank Memorial Fund and the Scripps Foundation for Research in Population Problems and under the auspices of the Population Association of America, the author has given a brief sketch of some branches of population research with the emphasis upon research which should next be undertaken. Such an analysis is valuable as it will indicate to those working or about to work in the rapidly growing field of population research the particular problems which may best be attacked now to round out and develop our knowledge. In the summary the author cites the three problems which seem to him outstanding: motives leading couples to want a given number of children; comparison of present with optimum distribution of population; changes arising in the hereditary make-up of the population. It would have been helpful if the author had cut each of these into a large number of specific suggestions for research of about the scope of a good Ph.D. thesis instead of leaving the reader to pick them up from the general body of the text.

EDWIN B. WILSON

WINSEMIUS, A. *Economische aspecten der internationale migratie.* Pub. no. 29. (Haarlem: Netherlands Econ. Inst. 1939. Pp. xvi, 155.)

In this book the author, as stated in the preface, attempts to build up a theory of international migration. He regards migration as comparable with the international movements of capital and of goods. His study of the long- and short-run economic tendencies of these various movements leads him to believe that free migration is an important means of permitting nations to profit collectively from the earth's resources.

The author holds that political development has not kept pace with economic development and that, particularly after the World War, free migration, free international exchange of goods, and free capital movement have tended to disappear, thereby intensifying the unequal distribution of the world's population, capital and natural resources. His solution is an international political organization to regulate and encourage international intercourse in the interest of all peoples.

At the end of the book we find a bibliography, a short summary in English, and a list of the publications of the Netherlands Economic Institute.

R. S. SABY

WITTKE, C. *We who built America: the saga of the immigrant.* (New York: Prentice-Hall. 1939. Pp. 565. $5, textbook ed., $3.75.)

Aperçu de la démographie des divers pays du monde, 1929-1936. (La Haye: Inst. Internat. de Stat. 1939. Pp. 433. Fl. 8.)

This comprehensive survey of demographic statistics assembles in convenient form the more important official data available. Included are population composition by age, sex, nationality, race, religion, and marital status; birth rates, death rates, fecundity rates, rates of natural increase, and net reproduction rates; trends in marriage, divorce, stillbirths, and illegitimate births; births according to month of the year and age of the mother; life expectancy tables and classification of principal causes of death. In some cases data for specific countries are broken down into provinces or geographic subdivisions; in the case of the United States, figures for the country as a whole are frequently supplemented by those for the states of New York, Illinois, Ohio, and Pennsylvania. A notable omission is that of rural-urban composition. The usefulness of the volume would be increased by showing more of the data in percentage form.

CARROLL D. CLARK

Urban population in the United States from the first census (1790) to the fifteenth census (1930). (Washington: U. S. Bur. of the Census. 1939. Pp. 11.)

Social Problems and Reforms

Who Gets the Money? A Study in the Economics of Scarcity and Plenty. By WALTER RAUTENSTRAUCH. Rev. ed. (New York: Harper. 1939. Pp. xiii, 122. $1.50.)

The present work is a revision of another published in 1934 having the same title. The revamping has, unfortunately, eliminated none of the cardinal fallacies mentioned by the present writer in his discussion of the book in the *American Economic Review* of March, 1935.

As in the earlier edition, the antiquated doctrine that only manual workers in such industries as manufacturing, construction, mining, and agriculture are true producers, forms the basis of much of the argument. The rewards of persons engaged in domestic service, trade, banking and finance, government, health work, teaching, and the practice of law are held to constitute an "overhead," the expense of carrying which is overburdening the "productive" members of society. All interest, dividends, rents, royalties, and entrepreneurial rewards are likewise counted as part of this "overhead."

Dr. Rautenstrauch still appears to be worried by the fact that, with increasing income, the American family demands more luxuries and entertainment rather than more bread and shoes. He seems also to believe that in the wages of this "producing" class we find the only significant source of that purchasing power which makes the wheels of industry revolve. A large part of the income of the "non-productive" members of society is tacitly assumed to be hoarded.

The book would be improved by greater consistency in definitions and use of terms. For example, despite the fact that chapter 2 begins by stating

that precise definitions are essential to clear thinking, we find such conflicts as the following: On one page, "capital" is defined as "things we have made which are usable for the making of other things," but on the next page, "capital income" is stated to be "that income which is paid for the use of capital whether that capital exists in the form of money, credit, machinery, buildings, grounds, patents, or other rights." Evidently the kind of *capital* from which *capital income* is derived is entirely different from the kind of "capital" defined in the earlier paragraph.

In chapter 5, Dr. Rautenstrauch presents figures indicating that, in such fields of industry as manufacturing, electric light and power, construction, mining, and railway transportation, the share of labor in the total value product has been progressively and sharply curtailed during the past twenty years, with the result that ability to buy and consume the products of industry has diminished to such an extent as to reduce greatly industrial activity. It appears, however, that the author has been misled by choosing 1919, a decidedly non-typical year, as a base for his index numbers. Dr. Robert F. Martin of the National Industrial Conference Board has computed for the years 1899 to 1937 inclusive the percentage distribution of the realized income derived from various industries. The following decennial averages compiled from his book, *National Income in the United States, 1799-1938,* show that the share of wages and salaries in the realized national income has shown no general tendency to shrink.

	Manufacturing	*Construction*	*Electric light and power*	*Mining and quarrying*	*Transportation*
1899-1908	81.2	81.3	58.0	74.5	66.7
1928-1937	81.9	81.8	39.7	71.6	74.6

Only in the case of the electric light and power industry has there been any marked decline in the proportionate share going to the employees. A slight fall in the percentage for mining and quarrying has been much more than offset by the sharp rise in the case of transportation. Furthermore, the author completely fails to show that a dollar of wages or salaries constitutes any more buying power than does a dollar of dividends or interest.

Dr. Rautenstrauch also presents charts indicating that income is becoming more and more concentrated in the hands of the favored few. How the data appearing to prove this contention have been derived is not explained. Since careful studies by other investigators indicate no marked change in the relative distribution of income, this oversight is unfortunate.

The final conclusion of the book is that the only feasible way of putting the unemployed back to work and making our nation's productive machinery operate effectively is to establish a socialistic state.

WILLFORD I. KING

New York University

NEW BOOKS

ARONOVICI, C. *Housing the masses.* (New York: Wiley. 1939. Pp. xv, 291. $3.50.)

Years of experience in teaching both housing and community planning have not only equipped Dr. Aronovici with the ability to evade grappling with solely the immediate objectives involved but they have also fortified him with the ability to expound the long-range aspects of housing.

Dr. Aronovici deprecates the tendency on the part of many persons to depend too much on the experience of other countries in planning programs looking to betterments of American housing conditions. The volume is by no means a case study. It is one, however, which might well be assimilated by diagnosticians of housing problems as a preventive against observations too narrowly clinical. Unfortunately it is too often overlooked that factors which have been causative agents in the housing problem do antedate by generations existing structures and conditions upon which attention is focussed. Land, population, money, earning power, traditions of law, of architecture are some of these factors. Pointedly handled as they are by Aronovici in their relation to present-day situations they have given to the book a definite quality of solidity. This quality is borne out also by the chapter on "Housing literature" which is a distinct departure from the customary assembly of bare references. The unusual illustrations are especially deserving of commendation.

A. R. HASSE

BOGARDUS, E. S. *The development of social thought.* (New York: Longmans Green. 1940. Pp. viii, 564. $3.50.)

BOODIN, J. E. *The social mind: foundations of social philosophy.* (New York: Macmillan. 1939. Pp. 604. $3.50.)

BORSODI, R. *Prosperity and security: a study in realistic economics.* (New York: Harper. 1938. Pp. ix, 319. $3.)

It has long been a fashionable pastime to caricature economic theorists as scholastics, prattling away in happy ignorance of actual economic behavior. Mr. Borsodi launches still another assault on these battered veterans. While there are incidental references to the problems of security and prosperity, the book is primarily a critique of economics and an attempt to turn the errant science into more fruitful paths.

The critical part of the book contains a number of accurate and suggestive observations. It must be admitted that economics has been concerned with the factory system to the neglect of small-scale and household production. It is also true that economists have tended to confuse production and acquisition, and have often under-estimated the importance of force and fraud in economic affairs.

While Mr. Borsodi wins these skirmishes with relative ease, his campaign as a whole is unsuccessful. His criticism of economics centers on its abstract character (the words "abstract" and "abstraction" occur seven times in one sentence on page 65). He fails to realize that this is a necessary characteristic of any science, and that the type of economics which he advocates would be at least as abstract as the doctrines which he denounces. Indeed, when he begins to erect his own economic principles, the author proliferates abstractions with the fertility of a medieval theologian. "The law of authority," "the law of personality," "the principle of justice," "the principle of obligation" and the

rest are at least as abstract as the principle of marginal productivity, and much less capable of inductive verification.

Intermingled with Mr. Borsodi's theoretical structure is an implicit program of social reform, which may be summarized as a flight from bigness. He believes that the efficiency of large-scale production has been greatly overestimated, and that two-thirds of all consumer goods could be produced more efficiently in the home. In support of this amazing statement, Mr. Borsodi contends that he can grind flour in an electrically-driven mill more cheaply than it can be purchased at retail. His calculations, however, appear to assume a much higher rate of plant utilization than could be obtained by a single family, while the time spent in supervising the process is considered to be worth nothing at all.

The operations of "big business" are denounced throughout the volume as essentially predatory. There is equally little sympathy for the economic activities of government. The intricate social security program is dismissed in a scornful paragraph as merely a means of supporting "armies of clerks and bureaucrats." The author fails to tell us, however, what we should put in the place of these undesirable institutions. He seems to have in mind a utopian society of self-sufficient family units. In such a society, of course, there would be no market for Mr. Borsodi's books, which might make it difficult for him to buy electric current for his flour mill.

LLOYD G. REYNOLDS

CREEDY, F. *Human nature writ large: a social psychologic survey and western anthropology.* (Chapel Hill: Univ. of North Carolina Press. 1939. Pp. ii, 484. $3.)

DEGEN, M. L. *The history of the woman's peace party.* Stud. in hist. and pol. sci., ser. lvii, no. 3. (Baltimore: Johns Hopkins Press. 1939. Pp. 266.)

EGGLESTON, F. W., and others. *Australian standards of living.* (Melbourne: Univ. Press (Oxford Univ. Press). 1939. Pp. 193. 10s.)

ELMER, M. C. *Social research.* (New York: Prentice-Hall. 1939. Pp. xvi, 522. $3.)

The author is concerned with the inadequacy of much of the research conducted in the social sciences, and with the disrepute these shortcomings have tended to create for social research in general. The book begins with a detailed definition and analysis of the subject, with emphasis on the need for raising the standards of social research to the level now generally applied to material research, and for employing those principles which distinguish true research from unorganized investigation or the collection of data merely to prove some point which it is to the investigator's interest to establish.

With these introductory warnings, the book proceeds to describe the many important possibilities of social research as a necessary base for developing a better society and avoiding some of the social conflicts which result from current lack of knowledge. For the main part of the book the author draws on his own wide experience, as well as that of many others, to describe the special problems which arise in different types of social research, discusses the principles by which various kinds of studies should be guided, and explains many of the techniques which have been used successfully in a wide variety of social studies.

The book is well documented with references to other writings on the sub-

ject, and the author has made a substantial contribution to a better understanding of the principles, the philosophy, and the technology necessary to productive research in the social field.

JOHN A. BROWNELL

FISHER, A. G. B. *Economic self-sufficiency.* Pamph. on world affairs, no. 4. (New York: Farrar and Rinehart. 1939. Pp. 32. 15c.)

FRANCIS, B. H. and FERGUSON, D. G. *What will social security mean to you?* (Cambridge: Am. Inst. for Econ. Res. 1939. $1.)

GIDEONSE, H. D. *Organized scarcity and public policy: monopoly and its implications.* Pub. policy pamph. no. 30. (Chicago: Univ. of Chicago Press. 1939. Pp. iv, 53. 25c.)

HAGOOD, M. J. *Mothers of the South: portraiture of the white tenant farm woman.* (Chapel Hill: Univ. of North Carolina Press. 1939. Pp. vii, 252. $2.)

HAZARD, J. N. *Soviet housing law.* (New Haven: Yale Univ. Press. 1939. Pp. 182. $2.50.)

HOLLIS, F. *Social case work in practice: six case studies.* (New York: Family Welfare Assoc. 1939. Pp. 323. $2.50.)

HOYT, H. *The structure and growth of residential neighborhoods in American cities.* (Washington: Fed. Housing Admin. 1939. Pp. vi, 178. $1.50.)

KNOTT, W. D. *The influence of tax-leeway on educational adaptability: a study of the relationship of residual or potential economic ability, expressed as tax-leeway, to educational adaptations in the state of New York:* Contribs. to educ. no. 785. (New York: Bur. of Pubs., Teachers Coll., Columbia Univ. 1939. Pp. x, 84. $1.60.)

LINDSTROM, D. E. *The church in rural life.* (Champaign, Ill.: Garrard Press. 1939. Pp. xiv, 145. 85c.)

LÜTGE, F. *Wohnungswirtschaft: eine systematische Darstellung unter besonderer Berücksichtigung der deutschen Wohnungswirtschaft.* (Jena: Fischer. 1940. Pp. xvi, 312. RM. 16.50.)

PANUNZIO, C. M. *Major social institutions: an introduction.* (New York: Macmillan. 1939. Pp. 631. $3.50.)

ROSEN, J. *Das Existenzminimum in Deutschland: Untersuchungen über die Untergrenze der Lebenshaltung.* (Zürich: Oprecht. 1939. Pp. 90.)

This volume reports an investigation of the standard of living among the unemployed in Berlin, based upon the returns of a questionnaire during the summer of 1933. Probably it is the first statistical study of the living conditions of German households with lower incomes. The questionnaire registers the accounts of a week. The households studied are divided into five groups: those with children, those without children, those composed of single persons, those with incidental income, and those without incidental income. The total membership of the 89 households is 258.

The incomes of the unemployed are fundamentally different from those of the employed. Wages, incidental earnings, money assistance and natural produce are the forms of income from private sources. Support, money aid and natural produce are the forms of income from public sources. The households received almost 30 per cent of their income from private sources; whereas some 70 per cent came from public sources.

General observation and the study show from year to year an increased worsening of the condition of both employers and unemployed. The process of pauperization for the family of the unemployed consists essentially in the

decline of the possibility of drawing income from wage work; hence the increase in the income from public sources. Comparison of the statistics of various forms of income from the two major sources for the years 1932 and 1933, clearly indicates the decline of the proportion of income from private labor. Households with children had the greater chance of maintaining the incomes assured from private enterprise. This may be due to the political measures of the existing regime. The level of income for the households of single persons sank the most. Formerly the obverse was the case.

The average income of all households was so low as to make it difficult for them to carry on without a measure of indebtedness. It is a remarkable fact that a large number of the households are debt free, largely because of the impossibility of repaying the loans. The indebtedness of 1933 among the unemployed is greater than that of the previous year, the highest being in households with incidental incomes.

Relatively, the worse the general economic situation of a particular household category, the larger is the amount of milk consumed. Butter, more of a luxury, shows the obverse tendency. Fats play an important rôle. The more favorable the financial situation of a household, the less important is the rôle of fats. The converse picture is again shown by the different kinds of meats. The poorer the group of households, the greater are the expenditures for bread over those for meat. Very much the same holds true in the consumption of potatoes. Households without incidental incomes show the lowest percentage of sugar consumption. For coffee, tea and cocoa a parallelism between unfavorable situation and decrease of consumption is demonstrable. The average household is able to spend only 11.39 RM. for food per week.

The uniform foods in the households studied are milk, animal and plant fats, meat, bread and potatoes, comprising 65 per cent of the budget. Margarine plays an important rôle in the household of the unemployed. Of all the various meats, sausage is the main item. A small percentage of horsemeat is consumed. The better situated the household is, the lower is the consumption of inferior meat.

While on the average 30 per cent of the income for the unemployed is paid out for rent, almost half of the income is paid for rent among the most unfavorable conditions. From the most meager income the amount for rent must first be set aside; hence for everything outside of shelter and food but little is left for insurance, newspapers, contributions, radio, books, clothing, health, transportation, gifts, fees and simple pleasures.

The major factors in the development of the standard of living from 1927 to 1933 are: The food index fell from 152 to 110. The nominal amount for wages and public support fell even more. There has been a continuous lowering of income among the workers and the unemployed families. There was a general shrinkage in national income which is reflected in the lowering of expenditure for social-political purposes. There took place a noticeable lowering of incomes throughout the social structure. The bulk of all employed worked for a wage which gradually declined so low that it predominantly remained below the limit of 100 RM. per month free from taxation.

HERMAN HAUSHEER

SMITH, A. H. *Your personal economics: an introduction to consumer problems.* (New York: McGraw-Hill. 1940. Pp. 664. $1.96.)

TEAD, O. *New adventures in democracy: practical applications of the democratic idea.* (New York: McGraw-Hill. 1939. Pp. xi, 229. $2.)

VERNON, H. M. *Health in relation to occupation.* (New York: Oxford. 1939. Pp. 363. $4.50.)

WICKENS, D. L. *Differentials in housing costs.* Bull. 75. (New York: Nat. Bur. of Econ. Res. 1939. Pp. 15. 25c.)

Mr. Wickens relates measured regional differentials in housing costs, as opposed to local differentials, to the basic requirements underlying exploration in housing problems. Thus, section 1 of the bulletin emphasizes differentials according to geographic regions and according to density of population. Section 2 describes other differentials and considers the influence of the more important factors which aid in their explanation and interpretation. Included in the factors are differences arising from the age distribution of existing houses, differences in land costs, in materials used and facilities offered, etc.

Inasmuch as the quantitative measures employed in the bulletin are primarily in terms of housing existing in 1930, the year of the latest census, Mr. Wickens anticipates questions as to the adequacy of description of housing costs measured by costs of existing housing alone and also whether the differentials revealed for 1930 are indicative of current differentials. Evidence is produced which would make it seem likely that differentials prevailing in 1930 still hold in the main.

A. R. HASSE

Consumer expenditures in the United States: estimates for 1935-36. (Washington: Nat. Resources Committee. 1939. Pp. ix, 195. 50c.)

Coöperative marketing of dairy products. Circ. C-116. (Washington: Farm Credit Admin., Coöp. Res. and Serv. Div. 1939. Pp. 47. 10c.)

Family income and expenditures, plains and mountain region. Part 1. *Family income.* Misc. pub. 345. (Washington: U. S. Dept. of Agric. 1939. Pp. 330. 30c.)

Urban and rural housing. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. xxxvi, 159. 80c.)

Insurance and Pensions

Old-Age Security: Social and Financial Trends. By MARGARET GRANT. Report prepared for the Committee on Social Security. (Washington: Committee on Social Security, Social Sci. Res. Council. 1939. Pp. xiii, 261. $2.50.)

This is a study of the financial and related aspects of the contributory old-age insurance systems of Germany, Great Britain, Czechoslovakia, and Sweden and of the non-contributory old-age pension systems of Denmark, Great Britain, New Zealand, and Australia. All of these countries except the last two were visited by Miss Grant and these two by Professor Robert Murray Haig, who turned over to Miss Grant information on old-age security collected in a fiscal problems study. Barring certain points subsequently discussed, the treatment is exceptionally well done and unusually accurate.

The greatest amount of attention is devoted to such aspects of the old-age security system of these countries as coverage, contribution and benefit rates, eligibility for benefits, income, expenditures and reserves, trends of population and costs. Upon all of these subjects, this book enriches the information heretofore available. Relying mainly upon official reports, Miss Grant presents most of the data she gathered in a series of original and interesting tables, which bring the story down to 1937-1938.

This study was undertaken "to throw light upon parallel problems in the United States." A preliminary, summarized version was published nearly two years ago, as the "Factual Report" included in *More Security for Old Age,* the report of the Committee on Old Age Security of the Twentieth Century Fund, which was widely quoted in the discussions which preceded the recent revision of the American old-age insurance system. This Factual Report was criticized by the reviewer as a presentation of only such aspects of the foreign experience which supported the recommendations of the Committee.

The present study is much less of a one-sided presentation but still suffers, to some extent, from the fact that it is oriented toward American controversies. The least satisfactory part of the study is the concluding chapter on "Foreign experience and American problems." It is apparent that the author has not studied the American system with anywhere near the thoroughness with which she studied the foreign systems. She repeats as statements of fact the claims of the critics of the original American act—for instance, with reference to the alleged 47 billion dollar reserve—in ignorance of the fact that these criticisms were based not upon the provisions of our law but upon assumptions which experience has proven to have been erroneous. Similarly, she uncritically accepts the interpretation of the recent amendments advanced by the same group of partisans.

The six chapters preceding the argumentative final chapter, which recount the foreign experience, also, suffer somewhat from the orientation to American controversies. There is no twisting of the facts to support the author's thesis, nor the complete ignoring of developments which run counter to her position, but aspects which do not interest her receive scant attention. It is possible, for example, to piece together scattered items in this book which clearly establish that old-age pensions in foreign countries are much smaller than in the United States, both in purchasing power and relative to average earnings. It can also be discovered that no foreign country has ever launched or revised an old-age insurance system without calculating the costs at least a generation ahead and having a definite plan for meeting the costs. But these and similar facts, which have very material bearing upon the financing of old-age insurance, are likely to be missed by the reader, because they are subordinated to other aspects which, standing

alone, can be cited as supporting the plan of "look ahead only five years" which has now been incorporated in the American law.

EDWIN E. WITTE

University of Wisconsin

NEW BOOKS

BAKER, H. *Social security: selected list of references on unemployment, old age and survivors', and health insurance.* Rev. ed. (Princeton: Princeton Univ. Ind. Rel. Section. 1939. Pp. 28.)

DICKINSON, F. G. *Insurance looks at the 1940's.* Address at 60th anniversary banquet of Western Underwriters Assoc. (Chicago: Western Underwriters Assoc. 1939. Pp. 22.)

There are four important prophecies which the author considers the most characteristic. First of all, the growth of population in the United States will be negligible. However, inside the almost stationary population "practically two-thirds of the odd million increase in the next four decades will be in the retired group." The nation will become more age-conscious and still less class-conscious. A second trend of importance to insurance will be that American wealth will increase in homes, be less in factories, and school buildings will be converted into homes for the old. I completely agree with these two arguments, but I doubt whether the third will be realized—namely, "that the average level of business activity in the coming decade will be about half-way between the two levels of the 1930's and the high levels of the 1920's." It is to be assumed that this sentence was written before the new world war had started. At least, the author believes that government control "has reached or passed its peak." However, he is rather careful in regard to the future trend as to federal control instead of dealing with 49 state insurance departments.

ALFRED MANES

EMMERSON, H. C. and LASCELLES, E. C. P. *Guide to the Unemployment Insurance acts.* (London: Longmans Green. 6s.)

FORD, P. *Incomes, means tests and personal responsibility.* (London: P. S. King. 1939. Pp. ix, 86. 5s.)

In this study Mr. Ford, a professor of economics at University College, Southampton, considers briefly several important problems connected with social insurance in England. His findings should likewise prove valuable to social security administrators in this country.

Since the competitive system, he writes, depends to some degree upon insecurity "to stimulate the worker to find a new and better market for his labour and to induce in him habits of foresight and thrift" (p. 2), the state must seek to combine individualism with collective aid. Such a task involves all of the difficulties of combining any two opposed principles. If the state pays the worker excessive relief, necessary stimulation to independent labor is partially eliminated. If the relief payment is small, the worker and his family may suffer or others not morally or legally responsible may be called upon to augment the inadequate collective aid.

Professor Ford proceeds to examine the theoretical and administrative problems of the means test which is society's method for supplying aid without discouraging initiative. He throws new light on the subject by a statistical

analysis of the extent of family responsibility and of the persons upon whom the responsibility actually falls. Such a study, he says, cannot "settle the problem of means tests," but does provide "a numerical basis to which all our arguments must have reference" (p. 25).

"Adequate payments and strict enquiry are the two principles on which relief must rest" (p. 71), concludes the author. The "strict enquiry," however, must be based on sound principles rather than on family liability regulations some of which go back to 1600. Consistency should also be attempted as between local and national regulations and as between regulations of different administrative bodies. Professor Ford offers his statistical study as a basis of facts for those who would make means tests more scientific.

FRANK T. DE VYVER

FRANCIS, B. H. *What will social security mean to you?* (Cambridge: Am. Inst. for Econ. Res. 1939. Pp. 85. $1.)

HOBBES, C. W. *Workmen's compensation insurance, including employers' liability insurance.* 2nd ed. (New York: McGraw-Hill. 1939. Pp. xviii, 707. $5.)

KINGSBURY, J. A. *Health in handcuffs.* (New York: Modern Age Books. 1939. Pp. ix, 210. 75c.)

This book by the former secretary of the Millbank Memorial Fund is a popular, non-technical review of the argument for health insurance and a national health program. It includes a compact historical review of the controversy over health insurance, and covers most of the recent surveys and the more important activities of the federal government (legislative, executive, and judicial) in the field of medical economics and public health. There is a wealth of factual material culled from many sources, as well as a selected list of references.

HOWARD M. TEAF, JR.

LESTER, R. A. and KIDD, C. V. *The case against experience rating in unemployment compensation.* Ind. rel. monog. no. 2. (New York: Ind. Rel. Counselors. 1939. Pp. 60. $1.)

This attack on what has been defined as "the American contribution to the theory of unemployment insurance" is a companion document to *The Case for Experience Rating in Unemployment Compensation and a Proposed Method,* by Herman Feldman and Donald M. Smith. To this reviewer Messrs. Lester and Kidd seem to have made the better case. In spite of poor organization the major points in their argument are clear: The purposes ascribed to experience rating are inconsistent with each other when practical methods are devised for effecting them. Theoretically, it might be possible to reward stability of employment *or* to distribute precisely the social costs of unemployment in proportion to responsibility, by appropriate arrangements; but both ends cannot be accomplished by the same methods, and one must be pursued at the expense of the other. Practically, the authors do not believe any scheme can be devised to accomplish these inconsistent aims for all industry. They challenge the theory that benefits paid are a sound measure of the amount of unemployment an employer has "caused," and that "employment stability" can be measured by number of lay-offs, and that methods of stabilization by one firm can be copied by all firms to accomplish a general stability within the whole system of business and industry. They deny that unemployment is "caused" by employers

and that reducing their taxes will give them incentive not to "cause" it, and take the much more realistic position that unemployment is a market phenomenon, a reflection of the general rate of spending for which society as a whole is responsible.

Even if such stabilization and allocation of responsibility were definable and possible of achievement, would the result be desirable when realized? "With 10,000,000 unemployed and the labor supply increasing at half million a year," ask the authors, "is not stabilization of employment absurd except in terms of expansion rather than a stagnant stability of employment?" May not experience rating even discourage employers from taking risks which might lead to expansion? May not stabilization of employment and unemployment at present levels and a long-time concentration of unemployment upon certain groups have far more serious social consequences than the instability represented by high turnover rates?

The authors have marshalled effectively most of the arguments ever presented against experience rating, and have added some of their own. Since the issue has been raised and pressed by a number of firms which have been able to stabilize employment, it is well to have attention called to the difference between economies for individual firms and the economics of an industrial system.

E. WIGHT BAKKE

WINSLOW, C. M. and CLARK, K. R. *Profit sharing and pension plans: their creation and tax effect.* (Chicago: Commerce Clearing House. 1939. Pp. xiii, 192. $2.)

Brief reading lists on the Social Security act, including references on the amendments of 1939. (Washington: Federal Security Agency, Social Security Board. 1939. Pp. 12. 5c.)

Compilation of the social security laws, including the Social Security act amendments of 1939 and other enactments of the 76th Congress, 1st Session. (Washington: Federal Security Agency, Social Security Board. 1939. Pp. 92.)

Industrial Commission of Wisconsin: Workmen's Compensation act, with amendments to October 22, 1939. (Madison: Industrial Commission of Wisconsin. 1939. Pp. 122.)

Insuring through your farmers' mutual. Circ. E-15. (Washington: Farm Credit Admin. 1939. Pp. 12. 5c.)

Outline of employer's duties under the Social Security act and the Internal Revenue code as amended August, 1939. (Washington: Social Security Board and Bur. of Internal Revenue. 1939. Pp. 14.)

Progress of state insurance funds under workmen's compensation, a quarter century of American experience. Bull. 30. (Washington: Labor Standards Div. 1939. Pp. 42. 15c.)

Socialism and Coöperative Enterprises

NEW BOOKS

BURLEY, O. E. *The consumers' coöperative as a distributive agency.* (New York: McGraw-Hill. 1939. Pp. xiv, 338. $3.)

Professor Burley of Ohio State University has in this book undertaken the important task of appraising the work of American consumers' coöperatives in the distributive field. He has done an excellent job. Much of his material is

drawn from the experiences of Ohio societies although he shows a clear understanding of the national movement. This book will be of use to those who wish to introduce in their courses materials on consumers' coöperation which have not an undertone of uncritical approval.

The conclusions reached by the author are on the whole highly favorable to the coöperatives. He holds, however, that their future in America will be largely in fields "primarily composed of convenience and specialty goods which carry relatively high margins; that are somewhat inelastic in demand and require little merchandising." Considerable emphasis is placed upon the need for the movement to employ systematic and careful testing so that coöperative products will maintain high quality standards. He also asks for closer attention to personnel work.

Here and there, expressions of excessive confidence in the existing distributive system crop out in the book. "It is also true that the United States possesses the most efficient and extensive retail distributing system that the world has ever known" (pp. 288-289). Comparisons of this scope are most meager; hence refutation is difficult. Yet one may suggest after reading the recent Twentieth Century Fund report, *Does Distribution Cost Too Much?,* that our system is still far from efficient. We may have the most extensive distributive system; yet 59 per cent of the total product price seems more than a trifle excessive for the distributive function.

COLSTON E. WARNE

COLE, G. D. H. *A plan for democratic Britain.* (London: Odhams. 1939. Pp. 255. 3s. 6d.)

DICKINSON, H. D. *Economics of socialism.* (London and New York: Oxford Univ. Press. 1939. Pp. x, 262. $3.25.)

GITLOW, B. *I confess: the truth about American communism.* (New York: Dutton. 1940. Pp. viii, 611. $3.75.)

HIRSCH, M. *Democracy versus socialism: a critical examination of socialism as a remedy for social injustice and an exposition of the single tax doctrine.* 3rd ed. (New York: Henry George School of Social Science. 1939. Pp. xxx, 468. $2.)

LAMONT, C. *You might like socialism: a way of life for modern man.* (New York: Modern Age Books. 1939. Pp. x, 308. 95c.)

MCFADDEN, C. J. *The philosophy of communism.* (New York: Benziger Bros. 1939. Pp. xx, 345. $3.50.)

MICKLEM, N. *National socialism and Christianity.* Pamph. on world affairs no. 18. (New York: Farrar and Rinehart. 1939. Pp. 31. 15c.)

VARGA, E. *Two systems: socialist economy and capitalist economy.* Translated from the German by R. PAGE ARNOT. (New York: Internat. Pubs. 1939. Pp. 268. $2.50.)

Varga is regarded by many as one of the ablest communist writers. Formerly professor of economics at the University of Budapest, he at present resides in the Soviet Union.

The book, originally written in German and published in 1937, was translated into English in 1939. The author, to paraphrase Marx and Engels, disdains to conceal his views and aims. The table of contents, for instance, contains such headings as the following: "Chronic mass unemployment under capitalism; full employment of all labour forces in the Soviet Union"; "Tendencies of capitalist economy to decline; systematic construction of socialist

economy"; "Mass ruin of peasants under capitalism; their rise to material and cultural well-being in the Soviet Union," etc.

Each of these chapters attempts a statistical analysis of the subject under consideration first in the capitalist countries—where decay is shown to be rampant, and then in the Soviet Union—where rapid progress is shown to be dominating the scene.

The author's approach as well as the statistical methods employed by him in the chapter dealing with the accumulation of capital in capitalist countries and in the U.S.S.R. are fairly typical of those employed in other chapters. In this chapter a table is offered to show that the "national wealth of the United States (in milliard dollars)" expressed in 1910-14 prices was 184 in 1912; 324 in 1929; and 261 in 1932. Inasmuch as the difference between 261 (in the *depression* year!) and 184 is 77 (42 per cent), the author states that the "percentage yearly increase between 1912 and 1932" amounted to 2.1. He adds, however, that "we are under no illusion about the great defects of these calculations. But they agree very roughly with historical development." Since Colin Clark's (*National Income and Outlay*) figures show England's "new capital investments in percentage of the national income" to have been in 1907—12.2; in 1924—8.1; in 1929—7.2; and in 1935—6.9, and since in 1925 (in milliards of pre-war marks) England's national wealth stood at 304 and her national income at 55 (or 6.1), the author concludes that in England "the yearly rate of accumulation amounts to a mere one to two per cent." Here he adds that "even if these figures be ever so inexact, they show nevertheless the extraordinary slow rate of accumulation even in the richest countries of capitalism."

Turning next to the Soviet Union, the author in a table entitled "The basic industrial funds of national economy (in milliard rubles, *in 1933 prices*)" shows a steady rise of these funds from 46.5 in 1925 to 121.1 in 1936, or a yearly average increase of 14.5 per cent. The facts that in a country starting, so to speak, from scratch the percentage increase is bound to be rather impressive, and that in 1925 the U.S.S.R. barely emerged from hyper-inflation, and the volume of industrial production in that year was far below the 1913 level do not seem to disturb the author.

The style is clear and the book on the whole makes interesting reading. There is no index.

ARTHUR Z. ARNOLD

Statistics and Its Methods

Principles of the Mathematical Theory of Correlation. By A. A. TSCHUPROW. Translated by M. KANTOROWITSCH. (London: Hodge. 1939. Pp. x, 194. 12s. 6d.)

If I judge correctly, many statisticians will welcome the translation of this little volume which, in the original has been widely recognized since the middle of the last decade as an important contribution to the subject of correlation. More particularly because of its emphasis on the fundamental notions and assumptions of the theory of correlation rather than on its methods and techniques of measurement and application, the

volume should recommend itself to statisticians working with the data of the social sciences.

The "intention (of the volume) is to provide a logical foundation for the theory of correlation." And as the first step toward that fulfillment, the author reconciles the mathematical and non-mathematical methods of determining associations, showing that "the former appears to be the logical sequence and systematic clarification of the latter." Furthermore, in order to go beyond the simple fact of association, that is, measure its intensity, only those methods developed by modern mathematical theory of correlation are suitable.

In turn, however, the meaning and significance of the concept of intensity of association need to be clarified and supplied with a logical background. Economic statisticians are generally aware of the inadvisability of inferring a causal relationship wherever a high degree of formal association is found between two economic variables. This does not, however, deter them from employing correlation methods and attaching a certain significance to the degree of intensity of associations. And quite rightly. But the meaning of, and the justification for that "certain significance" is seldom made clear. In the second step toward constructing a logical foundation, the author presents adequate grounds for the foregoing practice—providing a justification for assigning significance to measures of intensity when the formal association is non-indissoluble, and a basis for understanding that significance.

As the third step, the author distinguishes between the logic of correlation theory underlying investigations of variables which have a definite functional relationship, and of variables which have some form of probability (stochastic) relation—a distinction which statisticians should, but do not always bear in mind. The need for such awareness is made clear by the author in his caution that statisticians should employ every discretion in the use of methods and in interpretations when dealing with stochastically related variables.

Following on the general background or *a priori* relations of correlation theory, and covering in considerable part the same material, two chapters are then given over to a clear, thorough, and compact description of the more important measures of correlation and their formal interrelationships. The repetition is, however, well worth while, for the material takes on added clarity from the remarkably precise exposition.

The sixth and seventh chapters on problems of inferring the characteristics of a universe from samples, though space does not permit of any discussion, contain important contributions to the subject.

All in all, this is a valuable little treatise (its value is further enhanced by an excellent bibliography), and Mr. Kantorowitsch is to be commended for giving us an able translation. Finally, it should be pointed out

that, though the title suggests a burden of mathematics, a substantial part of the volume can be read profitably by the non-mathematician.

DAVID W. LUSHER

Bowdoin College

NEW BOOKS

ARKIN, H. and COLTON, R. R. *An outline of statistical methods.* 4th ed. (New York: Barnes and Noble. 1939. Pp. 271. $1.75.)

BRINTON, W. C. *Graphic presentation.* (New York: Brinton Assoc. 1939. Pp. 512. $5.)

CLARK, C. *A critique of Russian statistics.* (London: Macmillan. 1939. Pp. v, 76. $2.60.)

The title is misleading. It should be called computation of the Russia's national income expressed in market values prevailing in Great Britain during a base year (1934). This is done because prices in Russia do not necessarily bear any determinate relation either to the cost of production or to the consumers' demand.

Russia's real income per head of population at 1934 sterling prices was (deducting for depreciation) £20.1 in 1913, £18.8 in 1928 and £19.6 in 1934. The slow progress for 1928-34 was due to "a serious decline in agricultural productivity which offset the industrial gains." No systematic data were published after 1934; but from sporadic information the author concludes that considerable progress was made after that year, the average income rising by as much as 42 per cent between 1934 and 1937.

In spite of great ingenuity and remarkable skill displayed by the author, such computations are vague and unreliable. The census of 1939 revealed that all previous soviet computations of population were astonishingly inaccurate. Moreover, Mr. Clark does not seem to be familiar with soviet economics in general. For instance, he is surprised at the astounding "disguised unemployment" (in form of surplus rural population) known to all Russian economists and does not know that the soviet government is barring an influx of rural population into the cities by rigid passport regulations.

PAUL HAENSEL

CROXTON, F. E. and COWDEN, D. J. *Applied general statistics.* (New York: Prentice-Hall. 1939. Pp. xviii, 944. $4.)

It is indeed fortunate that, at last, someone has had the courage to put into one volume sufficient instructional statistical material to serve as the basis for an extended course of study and enough accessory tables to make the book worth keeping by students who have completed their training. Standard topics, including charts, distributions, significance, time series, and correlation, are presented in the order stated. A number of sub-topics have been considered including the more modern treatment of small samples. There is an extensive appendix containing derivations, tables, and a glossary of symbols. The authors, for the most part, have avoided the usual cryptic exposition that characterizes statistics texts. The illustrative material, as the title indicates, has not been selected from a single field. Varied and well chosen examples from the natural, physical, and social sciences have been used. A wide variety of illustrations

adds interest to the subject, provided the problems do not require too much general information outside the range of the student's field of specialization. Finally, the authors make no attempt to hide the fact that statisticians freely use the mathematical technique. Although nothing but algebra shows above the surface, probably, it was not expected that this book would be used by those unfortunate and unhappy statistics instructors who are forced to teach courses having no mathematical prerequisites.

E. B. DADE

MAHALANOBIS, P. C., editor. *Proceedings of the first session of the Indian Statistical Conference, held in Calcutta, January, 1938.* (Calcutta: Stat. Pub. Society. 1938. Pp. iv, 311.)

Papers are given on theoretical, agricultural, medical, public health, economic and industrial statistics. At the theoretical sessions—chairmanned by Professor R. A. Fisher, who also acted as president of the Conference—R. C. Bose and S. N. Roy read an important paper on the distribution of one form of Mahalanobis' D^2—a function which is useful as a measure of divergence of different populations. P. V. Sukhatme presented tables on the Fisher-Behrens test of the difference in the means of two normal samples. In testing the hypothesis that two samples come from populations of the same means, this test, unlike the t-test, does not neglect the possibility that differences actually found may be due to differences in the variances of the populations in question.

The section on agricultural statistics is interesting. Almost all papers in this class give illustrations of the Fisher-Yates technique of experimentation, the data being drawn from Indian research. Mixed yields, estimation of missing yields, randomized blocks, confounded arrangements, and factorial design are illustrated. Complex experiments of an order rarely seen in the publications of American agricultural stations are given in abundance.

H. A. FREEMAN

MILHAU, J. *Prix et production en agriculture: étude économétrique de quelques marchés agricoles.* (Paris: Recueil Sirey. 1938. Pp. xiii, 76.)

Starting from the law formulated by Gregory King at the close of the seventeenth century, to the effect that the total value of a crop of wheat diminishes when the size of the crop increases, and conversely, M. Milhau presents a simple mathematical proof to demonstrate that, assuming negative linear correlation between supply and price, the theoretical relation between the size of the crop and its total value may be expressed as a parabolic function, in which, as the size of the crop increases, its total value first increases from zero to a maximum and thereafter gradually diminishes again to zero. During the first half of this process (the A stage) an increase in size of crop is accompanied by an increase in total gross receipts of the cultivators until the maximum is reached; after this (in the B stage) any further increase in size of crop (other things remaining equal) results in a diminution of its total value until the theoretical limit at which the crop is so large as to have no economic value whatever. The validity of King's law is limited to the B stage. With a knowledge of the actual relationship between supply and price (obtainable by correlation) the author shows how the actual equations can be worked out, the optimum volume of production (as judged by maximum gross receipts for the cultivators) can be calculated and the economic statistician (still relying on the

same criterion) can ascertain which branches of cultivation it will pay to expand and which to curtail. Application of the method to data for five commodities produced in France from 1929 to 1935 is shown to indicate that under the conditions of demand and supply then prevailing, an increase in the production of potatoes or beans would have diminished gross agricultural income, while an increase in production of cherries, peaches, and walnuts (for which demand was increasing) would have increased total gross agricultural income.

It is not necessary to emphasize several obvious limitations of this technique as a sole guide to agricultural policy. Even if agriculture were controlled by some organization with ever-complete statistical data, it is not likely that policy would be directed toward maximum total gross receipts for the cultivators as a whole regardless of their costs of production; and the practical adoption of any such formula would be further hindered by considerations of changing demands, international trade, and other aspects of economic policy. Despite these and other practical objections, the treatment of the subject will be of interest to the mathematical theorist for its illustrations of the concepts of varying elasticity of prices and saturation of demand, and as an effort to explore the theoretical possibilities of determination of a market and ascertainment of conditions of equilibrium.

HUBERT R. KEMP

RADICE, E. A. *Savings in Great Britain, 1922-1935: an analysis of the causes of variations in savings.* (New York: Oxford Univ. Press. 1939. Pp. 146. $3.25.)

The subtitle of this statistical study formulates its aim. As such it is complimentary to Colin Clark's books. The analytical method is that of multiple correlation. The analysis is functional but the results are significant enough to allow tentative suggestions as to causations.

A theoretical discussion of the determinants of savings results in the working hypothesis that savings are a function of the level and the distribution of incomes, and of the interest rate. The author is careful to point out the difficulties of correlating time series. A general linear and logarithmic regression equation is assumed from which the results are exhaustively tested before being accepted.

Personal incomes, net incomes of business concerns, and savings by public bodies are successively subjected to the analysis. The components of savings are treated individually as important shifts from one type to another are obscured by an aggregative analysis. An attempt is made to separate savings by receivers of incomes above and below £250. The best correlations were found to exist between "real" rather than money terms. The "income elasticity" of savings of low income groups was found to be higher than that of the higher income groups, a result which tallies well with Colin Clark's figures.

A close linear relation between business savings and interest and profits was found. If business and private savings are compared it appears that the income elasticity of the richer groups, who save mainly through business firms, was considerably higher. A change in the income distribution in favor of the lower income groups would therefore reduce total savings.

The effect of changes of the interest rate was found to be negligible in the case of business savings, and could not be determined with certainty for personal savings. Savings by the state and local authorities were found to be negligible even in normal times.

The relation between changes in national income and net savings, *i.e.*, the "net investment multiplier" was found to be between 4½ and 7 for the pre-war, and between 4 and 5½ for the post-war period. The method of calculation brings out clearly the functional rather than causal nature of the multiplier.

The results, of which only a highly inadequate selection has been given, are used to check some of the business cycle theories. The author feels that there is at least evidence that no undersaving took place in Great Britain during the period under consideration.

WOLFGANG F. STOLPER

SMITH, E. L. *Tides in the affairs of men: an approach to the appraisal of economic change.* (New York: Macmillan. 1939. Pp. x, 178. $2.)

Smith, also author of *Common Stocks as Long-Term Investments,* published in 1924 and frequently cited in 1929, needlessly warns that he leaves "the comfortable confines of economics" (p. 4) to conduct "preliminary explorations" in regions occupied by "anthropologists, physicians, psychologists, geophysicists, meteorologists and astronomers" (p. 4).

A newspaper account of the Canadian Biological Conference in 1931 led to a "simple operation" upon an industrial stock price index, resulting in the "Decennial Pattern." This pattern, explained in the first part of the book, is purported to fit the stock price index for each of the last several decades, the upward trend of this index incidentally suggesting that the thesis of the 1924 monograph "need not be discarded" (p. 8). Stock prices following this pattern are concluded to have tended to decline in the third, seventh (and "sometimes" the sixth) and the tenth years of each decade and to rise in the fifth, eighth and the greater part of the ninth years (pp. 11 and 15). However, in view of the many exceptions (pp. 10 and 11) to the pattern's supposed regularity, acceptance of the periodicity of the "Decennial Pattern" becomes exceedingly difficult.

The second part of the book contains an abbreviated analysis of possible relationships between the business cycle and solar radiation as reflected in changes in barometric pressure, rainfall and sun-spot cycles. For a short time, an objective analysis seems about to be undertaken, but the "Decennial Pattern" returns and objectivity disappears. Efforts to substantiate use of the hypothesis of the "Decennnial Pattern" (chaps. 18 and 19), in predicting stock price movements in 1937, fail to prove its efficacy. Perhaps solar radiation affects the business cycle, but our limited knowledge of such influences precludes acceptance of a cyclical pattern thus constructed for use in predicting stock prices and general business conditions.

Statements about the periodicity of the "Decennial Pattern" repeatedly occur in the face of frequent admissions of the inadequacy of the investigation and the author's disclaimer of competence (p. 66) in the fields which he seeks to explore. Only limited familiarity with the literature of the so-called business cycle is revealed and the book is but sparsely documented. Evidence of a desire to analyze scientifically, in spite of hieroglyphic-laden charts, is buried beneath the apparent intent tc establish the "Decennial Pattern." While Smith may desire to encourage research (p. 163) in this direction, his book will hardly challenge economists.

L. DOUGLAS MEREDITH

SMITH, J. H. *Tests of significance: what they mean and how to use them.* (Chicago: Univ. of Chicago School of Business. 1939. Pp. ix, 90. $1.)

This study contains a brief discussion of each of a number of significance tests and a mathematical appendix covering their derivations. The tests included are well known: the binomial p, normal distribution, X^2 for means and goodness of fit, the F-test (Snedecor's more convenient form of the z-test), regression coefficients, correlation coefficient and partial correlation ratios.

Non-statisticians for whom, presumably, this tract was written, will regret the scarcity of examples. On the other hand, the appendix is of high quality. The author's derivations are systematic and good.

H. A. FREEMAN

WOLD, H. *A study in the analysis of stationary time series.* (Uppsala: Almquist and Wiksells. 1938. Pp. viii, 214. Kr. 8.)

Background: 1940 census. (Washington: U. S. Dept. of Commerce, Bur. of Census. 1939.)

Junior statistician: an examination outline. (New York: Arco Pub. Co.. 1939. Pp. 66. $1.50.)

Proceedings of the Industrial Statistics Conference held at Massachusetts Institute of Technology, Cambridge, September 8-9, 1938. (New York: Pitman. 1939. Pp. 315. $2.50.)

Studies in income and wealth. Vol. III. By the Conference on Research in National Income and Wealth. (New York: Nat. Bur. of Econ. Res. 1939. Pp. xxiii, 479. $3.50.)

PERIODICALS

General Works, Theory and Its History

AMOROSO, L. *The transformation of value in the productive process.* Econometrica, Jan., 1940. Pp. 11.

BENINI, R. *Il posto del risparmio in un programma di economia induttiva.* Giorn. d. Econ., May-June, 1939. Pp. 15.

BOGGIO, G. *Contingentamenti e cambi specifici.* Riv. Ital. di Sci. Econ., Aug., 1939. Pp. 27.

BORDIN, A. *Della discriminazione dei prezzi.* Giorn. d. Econ., July-Aug., 1939. Pp. 27.

BOULDING, K. E. *Quantitative economics.* Canadian Jour. Econ. and Pol. Sci., Nov., 1939. Pp. 8.

BRAMBILLA, F. *Ricerche teoriche sulle leggi di sviluppo delle industrie nuove.* Giorn. d. Econ., July-Aug., 1939. Pp. 16.

BREDT, O. *Preispolitik und Kostenrechnung.* Nord. Tids. f. Teknisk. Økon., Oct., 1939. Pp. 14.

BRINKMANN, C. *Das Problem der sozialökonomischen Synthese.* Weltwirtsch. Archiv, Sept., 1939. Pp. 11.

BRONFENBRENNER, M. *The Cobb-Douglas function and trade-union policy.* Am. Econ. Rev., Dec., 1939. Pp. 4.

BRONFENBRENNER, M. and DOUGLAS, P. H. *Cross-section studies in the Cobb-Douglas function.* Jour. Pol. Econ., Dec., 1939. Pp. 25.

BYE, R. T. *The scope and definition of economics.* Jour. Pol. Econ., Oct., 1939. Pp. 25.

CAPLAN, B. *Premature abandonment and the flow of investment.* Quart. Jour. Econ., Nov., 1939. Pp. 6.

CASSEL, G. *The economic balance of power.* Banking, Nov., 1939. P. 1.

CATIFORIS, S. *Revue critique de la théorie de la distribution.* Rev. des Sci. Econ. et Finan., July-Dec., 1939. Pp. 27.

COBBENHAGEN, M. J. H. *Over enige nieuwe economische litteratuur.* I. Maandschr. Econ., Dec., 1939. Pp. 10.

COLOMBOS, G. *La méthode de l'économie politique d'après le dernier livre du professeur B. Nogaro.* Rev. des Sci. Econ. et Finan., July-Dec., 1939. Pp. 17.

COMMONS, J. R. *Twentieth century economics.* Jour. Soc. Philos., Oct., 1939. Pp. 13.

DEMARIA, G. *Sulla validità del teorema del massimo di utilità nella concorrenza* (with reply by U. Gobbi). Giorn. d. Econ., July-Aug., 1939. Pp. 11.

DOBB, M. H. *A note on saving and investment in a socialist economy.* Econ. Jour., Dec., 1939. Pp. 16.

ECHAVARRÍA, J. M. *Notas para una sociologia de las crisis.* El Trimestre Econ., Oct.-Dec., 1939. Pp. 24.

EDSON, A. W. *A suggestion for notation in mathematical economics.* Quart. Jour. Econ., Nov.; 1939. Pp. 3.

FISCHER, K. *Beiträge zur Tarifanalyze.* Blätter f. Versicherungs-Math., Oct., 1939. Pp. 16.

FISHER, I. *A three-dimensional representation of the factors of production and their remuneration, marginally and residually.* Econometrica, Oct., 1939. Pp. 8.

GRAVES, C. H. *A note on Irving Fisher's concept of income* (with a rebuttal by I. Fisher). Econometrica, Oct., 1939. Pp. 13.

GRUCHY, A. G. *The concept of national planning in institutional economics.* So. Econ. Jour., Oct., 1939. Pp. 24.

GRÜNBAUM, I. *Lønforhøjelse som middel mod strukturel overopsparings-arbejdsløshed.* I, II. Nationalok. Tids., 77 Bind, 4 Hefte, 5 Hefte, 1939. Pp. 19, 28.

HAGSTROEM, K.-G. *Remarks on the theory of depreciation.* Econometrica, Oct., 1939. Pp. 15.

HERSKOVITS, M. J. *Anthropology and economics.* Jour. Soc. Philos., Jan., 1940. Pp. 16.

HICKS, J. R. *The foundations of welfare economics.* Econ. Jour., Dec., 1939. Pp. 17.

HONJO, E. *Economic thought in the early period of the Tokugawa era.* Kyoto Univ. Econ. Rev., Oct., 1939. Pp. 17.
HUXLEY, J. S. *Science, natural and social.* Scientific Mo., Jan., 1940. Pp. 12.
JENSEN, T. *Afskrivning, produktionshastighed og rentefod.* Nord. Tids. f. Teknisk. Økon., Oct., 1939. Pp. 28.
J., R. C. *James Harvey Rogers, 1886-1939.* Am. Econ. Rev., Dec., 1939. Pp. 2.
KAPP, K. W. *Economic regulation and economic planning: a theoretical classification of different types of economic control.* Am. Econ. Rev., Dec., 1939. Pp. 14.
KAUFMANN, F. *The significance of methodology for the social sciences.* Part II. Soc. Research, Nov., 1939. Pp. 19.
KING, W. I. *Are we suffering from economic maturity?* Jour. Pol. Econ., Oct., 1939. Pp. 14.
KITAMURA, H. *Das Transferproblem im wirtschaftlichen Kreislauf.* Weltwirtsch. Archiv, Nov., 1939. Pp. 34.
KNIGHT, F. H. *Ethics and economic reform.* III. *Christianity.* Economica, Nov., 1939. Pp. 25.
KOOPMANS, T. *The degree of damping in business cycles.* Econometrica, Jan., 1940. Pp. 11.
LERNER, A. P. *Ex-ante analysis and wage theory.* Economica, Nov., 1939. Pp. 14.
LÖSCH, A. *Eine neue Theorie des internationalen Handels.* Weltwirtsch. Archiv, Sept., 1939. Pp. 21.
MACHLUP, F. *Period analysis and multiplier theory.* Quart. Jour. Econ., Nov., 1939. Pp. 27.
————. *The theory of foreign exchanges.* Economica, Nov., 1939. Pp. 23.
MARGET, A. W. *The "rate of sale" and the "velocity of circulation of goods": a comment.* Economica, Nov., 1939. Pp. 6.
MARSCHAK, J. *Personal and collective budget functions.* Rev. Econ. Stat., Nov., 1939. Pp. 10.
MEISSNER, W. *Das Zinsfussproblem bei der Leibrente.* Blätter f. Versicherungs-Math., Oct., 1939. Pp. 25.
MENDERSHAUSEN, H. *On the significance of Professor Douglas' production function: a correction.* Econometrica, Oct., 1939. P. 1.
MITCHELL, W. C. *Edwin Robert Anderson Seligman, 1861-1939.* Am. Econ. Rev., Dec., 1939. Pp. 3.
NORRIS, R. T. *The analysis of demand.* Quart. Jour. Econ., Nov., 1939. Pp. 12.
PALANDER, T. *Konkurrens och marknadsjämvikt vid duopol och oligopol.* I, II. Ekon. Tids., May, Sept., 1939. Pp. 23, 29.
PANE, L. D. *Intorno alle origini del materialismo storico.* Giorn. d. Econ., May-June, 1939. Pp. 21.
PAPI, G. U. *Schemi recenti di comunismo e socialismo.* Giorn. d. Econ., May-June, 1939. Pp. 30.
PEDERSEN, H. W. *Omkring den moderne pristeori.* III. Nationaløk. Tids., 77 Bind, 4 Hefte, 1939. Pp. 24.
PERRY, R. B. *The moral norm of social science.* Jour. Soc. Philos., Oct., 1939. Pp. 13.
PHILIP, K. *Om indkomstforplantning og beskaeftigelsesforplantning.* Nationaløk. Tids., 77 Bind, 5 Hefte, 1939. Pp. 31.
POSTAN, M. M. *El metodo historico en las ciencias sociales.* El Trimestre Econ., Oct.-Dec., 1939. Pp. 23.
RATH, K. W. *Die Wendung zur Volkswirtschaft als Aufgabe volkswirtschaftlicher Theorie.* Weltwirtsch. Archiv, Sept., 1939. Pp. 57.
ROBINSON, H. W. *Consumer's surplus and taxation: ex ante or ex post?* So. African Jour. Econ., Sept., 1939. Pp. 11.
ROSSI, L. *L'equo prezzo (prezzo corporativo).* Riv. Ital. di Sci. Econ., July, 1939. Pp. 13.
SAMUELSON, P. A. *A synthesis of the principle of acceleration and the multiplier.* Jour. Pol. Econ., Dec., 1939. Pp. 12.
SCHMIDT, E. *Økonomisk definerede Produktionsfunktioner.* Nord. Tids. f. Teknisk. Økon., Oct., 1939. Pp. 22.
SCROGGS, W. O. *What's the matter with economics?* Sat. Rev. of Literature, Nov. 11, 1939.
SILVA, J. *Económia dirigida y "planes."* Rev. de Hacienda, Sept., 1939. Pp. 3.
SMITHIES, A. *The maximization of profits over time with changing cost and demand functions.* Econometrica, Oct., 1939. Pp. 7.

STEVENSON, C. R. *To amend the "law" of supply and demand.* Advanced Manag., Fall, 1939. Pp. 7.

VINING, R. *Suggestions of Keynes in the writings of Veblen.* Jour. Pol. Econ., Oct., 1939. Pp. 13.

Economic History and Geography

COASE, R. H. *Rowland Hill and the penny post.* Economica, Nov., 1939. Pp. 13.

CONDLIFFE, J. B. and RICHARDS, C. S. *Searchlight on Africa. 1. An African survey. 2. Africa and the world economy.* So. African Jour. Econ., Sept., 1939. Pp. 15.

HANSEN, H. E. *The economic position and development of Canada.* Conf. Bd. Econ. Record, Oct. 23, 1939. Pp. 17.

HAYTER, E. W. *An Iowa Farmers' Protective Association: a barbed wire patent protest movement.* Iowa Jour. Hist. and Pol., Oct., 1939. Pp. 32.

KEMMERER, D. L. *The colonial loan-office system in New Jersey.* Jour. Pol. Econ., Dec., 1939. Pp. 8.

NORMANO, J. F. *Recent attempts at an economic bibliography on Latin America.* Proc. 2nd Conv. Inter-Amer. Bibliog. and Library Assoc., 1939. Pp. 9.

PEARSALL, C. W. *Some account of the origin and development of the Economic Society of South Africa.* So. African Jour. Econ., Sept., 1939. Pp. 13.

PRESTON, R. A. *Fishing and plantation. New England in the Parliament of 1621.* Am. Hist. Rev., Oct., 1939. Pp. 15.

SCHMIDT, L. B. *Internal commerce and the development of national economy before 1860.* Jour. Pol. Econ., Dec., 1939. Pp. 25.

WILGUS, A. C. *Some "London Times" comments on Secretary Chase's financial administration, 1861-1864.* Miss. Valley Hist. Rev., Dec., 1939. Pp. 4.

Agriculture, Mining, Forestry, and Fisheries

BARBER, A. *Rubber continues under control.* Far East. Survey, Oct. 11, 1939. Pp. 3.

————. *Tin control in a major war.* Far East. Survey, Nov. 22, 1939. Pp. 6.

BARNES, K. *Soviets hope for rubber self-sufficiency by 1942.* Far East. Survey, Nov. 8, 1939. Pp. 2.

BECKER, J. A. and HARLAN, C. L. *Developments in crop and livestock reporting since 1920.* Jour. Farm Econ., Nov., 1939. Pp. 29.

BENEDICT, M. R. *Development of agricultural statistics in the Bureau of the Census.* Jour. Farm Econ., Nov., 1939. Pp. 26.

BILIMOVIC, A. *Die vergleichende Untersuchung von Agrarstrukturen.* Weltwirtsch. Archiv, Nov., 1939. Pp. 30.

BRITNELL, G. E. *The rehabilitation of prairie farms.* Canadian Banker, Oct., 1939. Pp. 14.

DILLNER, G. *Die einkommenpolitische Bedeutung landwirtschaftlicher Marktregelungen.* Weltwirtsch. Archiv, Sept., 1939. Pp. 49.

EBLING, W. H. *Why the government entered the field of crop reporting and forecasting.* Jour. Farm Econ., Nov., 1939. Pp. 17.

FLAY, A. H. *The rehabilitation of farmers in New Zealand.* Econ. Record, Oct., 1939. Pp. 8.

FORSTER, G. W. *Land use and the internal operation of farms.* So. Econ. Jour., Oct., 1939. Pp. 13.

FRANKLIN, H. L. *Wartime control of agricultural trade and production in belligerent countries.* Foreign Agric., Nov., 1939. Pp. 8.

GARFIAS, V. R. *Japon y el embargo del petroleo.* El Trimestre Econ., Oct.-Dec., 1939. Pp. 11.

GORDON, J. and WRAY, C. C. *Strategic position of petroleum in the war.* Barron's, Nov. 13, 1939.

GUADALAJARA G., M. *Idea general sobre la estimación de las reservas petroleras.* Rev. de Fomento, Sept., 1939. Pp. 19.

HAAVELMO, T. *A dynamic study of pig produttion in Denmark.* Nord. Tids. f. Teknisk. Økon., Oct., 1939. Pp. 40.

HALE, R. F. *Estimating local market prices and farm labor since 1920.* Jour. Farm Econ., Nov., 1939. Pp. 10.
HOWARD, L. V. *Recent developments in the field of federal-state coöperation in agriculture.* Jour. Politics, May, 1939. Pp. 7.
JESSEN, R. J. *An experiment in the design of agricultural surveys.* Jour. Farm Econ., Nov., 1939. Pp. 8.
JOHNSON, E. C. *Farm-credit policy as a factor in soil conservation.* Jour. Land and Pub. Util. Econ., Nov., 1939. Pp. 6.
JONKMANS, V. *Un index mensual des prix de détail agricoles de 1920 à 1939 et un aperçu des indices agricoles en Belgique.* Annales de la Soc. Sci. de Bruxelles, Apr.-Sept., 1939. Pp. 21.
LITCHFIELD, P. W. *Rubber's position in modern civilization.* Scientific Mo., Dec., 1939. Pp. 2.
MAUTNER, W. *Empire, petroleum empire en de oorlog.* Maandschr. Econ., Oct., 1939. Pp. 21.
MURRAY, N. C. *A close-up view of the development of agricultural statistics from 1900 to 1920.* Jour. Farm Econ., Nov., 1939. Pp. 11.
PEARSON, F. A. and BRANDOW, G. E. *Agricultural price statistics in the United States and abroad.* Jour. Farm Econ., Nov., 1939. Pp. 11.
PORTER, C. *Philippine independence in a mineral-conscious world.* Far East. Survey, Nov. 8, 1939. Pp. 7.
ROSSITER, F. J. *Agriculture in China.* Foreign Agric., Oct., 1939. Pp. 68.
SARLE, C. F. *Future improvement in agricultural statistics.* Jour. Farm Econ., Nov., 1939. Pp. 8.
———. *The possibilities and limitations of objective sampling in strengthening agricultural statistics.* Econometrica, Jan., 1940. Pp. 17.
SCHABEN, L. J. *The Australian wheat industry assistance scheme.* Foreign Agric., Nov., 1939. Pp. 16.
SCHULTZ, T. W. *Scope and method in agricultural economics research* (with reply by J. D. Black). Jour. Pol. Econ., Oct., 1939. Pp. 17.
SHEPHERD, J. *Allied resources east of Singapore.* Far East. Survey, Oct. 11, 1939. Pp. 6.
STERNBERG, F. *Russia's economic resources.* Yale Rev., Dec., 1939. Pp. 19.
STINE, C. M. A. *A chemist looks at agriculture.* Vital Speeches, Jan. 1, 1940. Pp. 5.
TAYLOR, H. C. *A century of agricultural statistics.* Jour. Farm Econ., Nov., 1939. Pp. 10.
TUTTLE, F. W. *An evaluation of the New Deal agricultural program.* Social Forces, Dec., 1939. Pp. 6.
WOYTINSKY, E. S. and WOYTINSKY, W. S. *Progress of agricultural statistics in the world.* Jour. Farm Econ., Nov., 1939. Pp. 27.

Manufacturing Industries

BOWEN, I. *The building industry in war-time.* Econ. Jour., Dec., 1939. Pp. 7.
LONG, C. D., JR. *The building industry—maker and breaker of booms and depressions.* Dun's Rev., Dec., 1939. Pp. 5.
LOUGEE, E. F. *The rise of synthetic plastics.* Dun's Rev., Dec., 1939. Pp. 9.
NICHOLLS, W. H. *Post-war concentration in the cheese industry.* Jour. Pol. Econ., Dec., 1939. Pp. 23.
ROGERS, C. L. *Inventories and new orders in manufacturing industry, 1929-1939.* Conf. Bd. Econ. Record, Dec. 16, 1939. Pp. 7.
SERVÍN, A. *Las utilidades de la industria textil mexicana.* Rev. de Hacienda, Oct., 1939. Pp. 6.
Aviation: war production possibilities. Index, N.Y. Trust Co., Winter, 1939. Pp. 9.

Transportation and Communication

ALLEN, E. D. II. *The theory of highway costs and their allocation.* Jour. Land and Pub. Util. Econ., Nov., 1939. Pp. 12.

ARNOLD, J. S. *The future of the railroads and the trucks.* Vital Speeches, Nov. 15, 1939. Pp. 3.

BACH, F. *La nacionalización de los ferrocarriles.* Rev. de Hacienda, Sept., 1939. Pp. 11.

BARNES, K. *Soviet Union improving railway network.* Far East. Survey, Dec. 20, 1939. Pp. 2.

DE BUSTAMANTE, T. S. *La coordinación de transportes de la ciudad de Buenos Aires.* Rev. de Ciencias Econ., Sept., 1939. Pp. 29.

FENNELL, W. G. *Protective committees and deposit agreements in railroad reorganizations.* Yale Law Jour., Dec., 1939. Pp. 17.

HARDT, F. C. *Wirtschaftliche Lage der englischen Eisenbahnen und ihre Ausgleichsbestrenungen im Verkehrswesen.* Archiv f. Eisenbahnw., Sept.-Oct., 1939. Pp. 10.

KÜHN, A. *Das britische Transportwesen an der Westfront im März 1918.* Archiv f. Eisenbahnw., Sept.-Oct., 1939. Pp. 22.

LANKS, H. C. *The Pan American Highway.* II. Scientific Mo., Nov., 1939. Pp. 14.

LAST, H. V. and WILLEBRAND, D. *The railways and tramways of the Netherlands Indies in 1938.* Netherlands Indies, June, 1939. Pp. 7.

MACMAHON, A. W. and DITTMAR, W. R. *Autonomous public enterprise—the German Railways.* Pol. Sci. Quart., Dec., 1939. Pp. 33.

PORTER, C. *Philippines improving transportation facilities.* Far East. Survey, Dec. 6, 1939. Pp. 2.

The number of licenses for using wireless receiving sets in the Netherlands Indies during 1927-1938. Netherlands Indies, July, 1939. P. 1.

Trade, Commerce, and Commercial Crises

BOUSQUET, G. H. *The international position of Netherlands India.* Pacific Affairs, Dec., 1939. Pp. 15.

BRIQUET, P. E. *Economic aspects of the Soviet-German pact.* Canadian Banker, Oct., 1939. Pp. 7.

CASSADY, R., JR. *Trade barriers within the United States.* Harvard Bus. Rev., Winter, 1940. Pp. 17.

CASTLE, W. R. *Trade and investment in Latin America.* Vital Speeches, Dec. 1, 1939. Pp. 5.

CONDLIFFE, J. B. *The international position as it affects New Zealand.* Econ. Record, Oct., 1939. Pp. 8.

COPLAND, D. B. *The economics of insulation.* Econ. Record, Oct., 1939. Pp. 7.

CRAWFORD, H. P. *The check in Argentine commerce.* Compar. Law Series, Dept. of Comm., Dec., 1939. Pp. 4.

DUPRIEZ, L.-H. *La conjoncture économique de la Belgique et du Luxembourg.* Bull. de l'Inst. de Recherches Econ., Nov., 1939. Pp. 19.

FARLEY, M. S. *Japanese-American commercial agreement expires.* Far East. Survey, Jan. 3, 1940. Pp. 2.

GO, T. *The future of foreign concessions in China.* Pacific Affairs, Dec., 1939. Pp. 6.

HANSEN, H. E. *Current business conditions.* Conf. Bd. Econ. Record, Oct. 20, 1939. Pp. 8.

INMAN, S. G. *Planning Pan-American trade.* Harvard Bus. Rev., Winter, 1940. Pp. 11.

KOEPFLE, L. G. *Legislation affecting commerce enacted by the Seventy-Sixth Congress, First Session.* Compar. Law Series, Dept. of Comm., Oct., 1939. Pp. 10.

LINDER, R. L. *New Mexico legal barriers to interstate trade.* New Mexico Bus. Rev., July, 1939. Pp. 7.

LOREE, R. F. *Prospects for American trade with Europe.* Bankers Mag., Nov., 1939. Pp. 5.

MCKAY, R. H. *Foreign economic conditions.* Conf. Bd. Econ. Record, Oct. 20, 1939. Pp. 4.

MAUNIER, R. *Das Zollregime des französischen Kolonialreiches in seiner historischen Entwicklung.* Weltwirtsch. Archiv, Sept., 1939. Pp. 41.

M., W. H. *Economic warfare with Japan or a new treaty?* Foreign Affairs, Jan., 1940. Pp. 2.

DE OTEYZA, E. *Comercio exterior: un ensayo reciente.* El Trimestre Econ., Oct.-Dec., 1939. Pp. 38.

SAMUELSON, M. C. *The Australian case for protection re-examined* (with comment by K. L. Anderson). Quart. Jour. Econ., Nov., 1939. Pp. 9.

SCHEERS, J. *El crédito y el seguro en el comercio exterior: la Oficina Nacional "Ducroire."* Rev. de Hacienda, Aug., 1939. Pp. 17.

SHEPHERD, J. *New Zealand extends import restrictions.* Far East. Survey, Dec. 6, 1939. Pp. 2.

SPIEGELENBERG, J. H. *Bilateralisme.* De Econ., Oct., 1939. Pp. 28.

STEWART, J. R. *North China restrictions and exports to the U. S.* Far East. Survey, Oct. 11, 1939. Pp. 2.

SUTCH, W. B. *The Ottawa agreement and after.* Econ. Record, Oct., 1939. Pp. 13.

TAYLOR, G. R. *Shall state boundaries become Chinese walls?* Dun's Rev., Oct., 1939. Pp. 5.

TRUEBLOOD, H. J. *War and United States—Latin American trade.* Foreign Policy Rep., Dec. 1, 1939. Pp. 11.

ZEMPEL, A. *Regional variation in business cycles in the United States.* Southwest Soc. Quart. Jour., Sept., 1939. Pp. 10.

Accounting, Business Methods, Investments, and the Exchanges

BAKER, J. C. *Executive compensation, 1928-1936.* Dun's Rev., Nov., 1939. Pp. 7.

BARLOON, M. J. *Purchase discounts.* Jour. Accountancy, Nov., 1939. Pp. 6.

BEACH, W. E. *Stock market continuity.* Am. Econ. Rev., Dec., 1939. Pp. 16.

BECKWITH, B. P. *The relationship of top salaries to profits of manufacturing companies.* So. Econ. Jour., Oct., 1939. Pp. 7.

BOORD, H. O. *The public accountant and the budget.* Jour. Accountancy, Nov., 1939. Pp. 4.

BUCHANAN, N. S. *The economics of corporate reorganization.* Quart. Jour. Econ., Nov., 1939. Pp. 23.

CARTMELL, N. M. *A prophecy for time and motion study.* Advanced Manag., Fall, 1939. Pp. 4.

CHESTER, C. M. *Industry's stand against war.* Vital Speeches, Nov. 1, 1939. Pp. 2.

CONWAY, C. C. *The evolution of management attitudes.* Advanced Manag., Fall, 1939. Pp. 4.

COPELAND, M. T. *The job of an executive.* Harvard Bus. Rev., Winter, 1940. Pp. 13.

CRAIG, D. R. *Recent retailing trends in Europe.* Dun's Rev., Dec., 1939. Pp. 5.

CROWLEY, W. J. *The prospects for continued electric rate reductions.* Jour. Land and Pub. Util. Econ., Nov., 1939. Pp. 9.

DAVIS, D. S. *War-time casualties on the business front.* Dun's Rev., Oct., 1939. Pp. 2.

DENTON, E. V. *Sales and statistical analysis for a metal manufacturer.* N.A.C.A. Bull., sec. i, Dec. 15, 1939. Pp. 9.

FELDMANN, M. A. *Separate accounting basis v. apportionment.* Jour. Accountancy, Nov., 1939. Pp. 5.

FISCHER, E. R. *Active, low-priced common stocks versus the Dow-Jones industrials.* Jour. Bus. Univ. Chicago, Oct., 1939. Pp. 28.

FOULKE, R. A. *Changeable character and relentless ratios.* Dun's Rev., Dec., 1939. Pp. 7.

————. *Fourteen financial ratios for 24 wholesale and 12 retail trades.* Dun's Rev., Nov., 1939. Pp. 4.

FRANCIS, C. *Making more jobs.* Dun's Rev., Jan., 1940. Pp. 4.

FRANK, J. N. *Accounting for investors.* Jour. Accountancy, Nov., 1939. Pp. 10.

GAILLARD, J. *Standardization—the automatic pilot of management.* Advanced Manag., Fall, 1939. Pp. 6.

GEORGE, E. B. and TEBEAU, R. L. *Profits and dividends: big business vs. small.* Dun's Rev., Jan., 1940. Pp. 12.

GOETZ, B. E. *What's wrong with accounting?* Advanced Manag., Fall, 1939. Pp. 7.

GORDON, A. P. L. *The capital market of today.* Jour. Royal Stat. Soc., part iv, 1939. Pp. 31.

GROSSMAN, W. L. *Public utility rate base—past, present, or future value.* Jour. Bus. Univ. Chicago, Oct., 1939. Pp. 14.

HAUN, R. D. *Inconsistencies in public utility depreciation.* Michigan Law Rev., Dec., 1939. Pp. 28.

HUNT, P. *The standing receiver in bankruptcy in New York.* Yale Law Jour., Nov., 1939. Pp. 17.

HUTCHINSON, K. D. *Design piracy.* Harvard Bus. Rev., Winter, 1940. Pp. 8.

KELLER, I. W. *The function of costs in a joint-products industry.* N.A.C.A. Bull., sec. i, Nov. 15, 1939. Pp. 14.

KRACKE, E. A. *Inventories and taxes.* Jour. Accountancy, Dec., 1939. Pp. 8.

LITTLETON, A. C. *The integration of income and surplus statements.* Jour. Accountancy, Jan., 1940. Pp. 11.

MALOTT, D. W. *Does future trading influence prices?* Harvard Bus. Rev., Winter, 1940. Pp. 14.

MAY, A. W. *American and European valuation of equity capital: a comparison.* Am. Econ. Rev., Dec., 1939. Pp. 12.

MAY, G. O. *Valuation or historical cost: some recent developments.* Jour. Accountancy, Jan., 1940. Pp. 8.

MCFARLAND, W. B. *When is selling at a loss a profitable business policy?* N.A.C.A. Bull., sec. i, Nov. 1, 1939. Pp. 11.

MCINTYRE, F. *The effect of the undistributed profits tax upon the distribution of corporate earnings—a statistical appraisal.* Econometrica, Oct., 1939. Pp. 13.

PECK, S. A. *Further thoughts on the management aspect of accounting control.* N.A.C.A. Bull., sec. i, Jan. 1, 1940. Pp. 20.

PERSON, H. S. *Influences of environmental changes on distribution problems.* Advanced Manag., Fall, 1939. Pp. 4.

PREINREICH, G. A. D. *The economic life of industrial equipment.* Econometrica, Jan., 1940. Pp. 33.

PRESGRAVE, R. *Effort rating.* Advanced Manag., Fall, 1939. Pp. 8.

RUGGLES, C. G. *The relation of corporate surpluses to income and employment.* Am. Econ. Rev., Dec., 1939. Pp. 10.

RUGGLES, C. O. *The rôle of rate making.* Harvard Bus. Rev., Winter, 1940. Pp. 16.

SALIERS, E. A. *Financial aspects of depreciation.* Jour. Accountancy, Nov., 1939. Pp. 4.

SANDERS, T. H. *British accounting practices and the profession.* Harvard Bus. Rev., Winter, 1940. Pp. 16.

STARR, G. W. and STEINER, G. A. *Births and deaths of retail stores in Indiana, 1929-1937.* Dun's Rev., Jan., 1940. Pp. 6.

STEMPF, V. H. *Extensions of auditing procedure.* Jour. Accountancy, Jan., 1940. Pp. 7.

TAGGART, H. F. *The Standard Brands case.* N.A.C.A. Bull., sec. i, Oct. 15, 1939. Pp. 68.

VITO, F. *Corporate saving as a factor in the business cycle.* Sankhyā, Indian Jour. Stat., Sept., 1939. Pp. 7.

WERNTZ, W. *Financial statements for investors.* Jour. Accountancy, Jan., 1940. Pp. 8.

YOURD, K. L. *Trading in securities by directors, officers and stockholders: section 16 of the Securities Exchange act.* Michigan Law Rev., Dec., 1939. Pp. 27.

Competitive bidding for audit engagements. Jour. Accountancy, Dec., 1939. Pp. 2.

The organisation and functions of personnel management in industrial undertakings. Internat. Lab. Rev., Dec., 1939. Pp. 3.

Capital and Capitalistic Organization

HERRING, H. L. *The outside employer in the southern industrial pattern.* Social Forces, Oct., 1939. Pp. 12.

HOMAN, P. T. *Notes on the anti-trust law policy.* Quart. Jour. Econ., Nov., 1939. Pp. 30.

HULPIAU, R. *Enkele aspecten van het Kartelprobleem.* Annales des Sci. Comm. et Econ., 3e Année, no. 6. Pp. 14.

KAMII, Y. *Industrial transformation in Japan, 1929-1936.* Internat. Lab. Rev., Oct., 1939. Pp. 18.

KEYNES, J. M. *The income and fiscal potential of Great Britain.* Econ. Jour., Dec., 1939. Pp. 14.

OTSUKA, I. *Characteristic features of Japanese small industries and policies for their development.* Kyoto Univ. Econ. Rev., Oct., 1939. Pp. 14.

WILK, K. *The international sugar regime.* Am. Pol. Sci. Rev., Oct., 1939. Pp. 19.

WILSON, G. L. and ROSE, J. R. *Recent trends in public utility regulation.* Am. Econ. Rev., Dec., 1939. Pp. 14.
Economic control in Japan: the mobilisation of resources and industries. Internat. Lab. Rev., Dec., 1939. Pp. 15.

Labor and Labor Organizations

ANDREWS, E. F. *The administration of the Fair Labor Standards act in the United States.* Internat. Lab. Rev., Nov., 1939. Pp. 25.
ARNDT, P. *Der Arbeitslohn in Japan.* Weltwirtsch. Archiv, Nov., 1939. Pp. 26.
COYNE, J. P. *Jurisdictional disputes in building and construction industry.* Am. Fed., Dec., 1939. Pp. 5.
FARLEY, M. S. *Serious shortage of agricultural labor in Japan.* Far East. Survey, Oct. 11, 1939. Pp. 2.
FIERST, H. A. and SPECTOR, M. *Unemployment compensation in labor disputes.* Yale Law Jour., Jan., 1940. Pp. 31.
FLEMING, J. M. *Secular unemployment.* Quart. Jour. Econ., Nov., 1939. Pp. 28.
GAMM, S. *Characteristics of 60 company-dominated unions.* Labor Relations Rep., Dec. 4, 1939. Pp. 8.
HENIG, H. *Should professors unionize?* Am. Econ. Rev., Dec., 1939. Pp. 2.
JAFFE, L. J. *Inter-union disputes in search of a forum.* Yale Law Jour., Jan., 1940. Pp. 37.
LESTER, R. A. *Overtime wage rates.* Am. Econ. Rev., Dec., 1939. Pp. 3.
MAKOWER, H. and ROBINSON, H. W. *Labour potential in war-time.* Econ. Jour., Dec., 1939. Pp. 7.
McNATT, E. B. *Labor again menaced by the Sherman act.* So. Econ. Jour., Oct., 1939. Pp. 19.
MYERS, C. A. *Employment stabilization and the Wisconsin act.* Am. Econ. Rev., Dec., 1939. Pp. 16.
NEEDLEMAN, R. L. *Are domestic workers coming of age?* Am. Fed., Oct., 1939. Pp. 6.
NELSON, L. *Distribution and extent of unemployment among farm laborers in the United States.* Social Forces, Dec., 1939. Pp. 8.
PUNKE, H. H. *Labor laws and leisure hours.* So. Econ. Jour., Oct., 1939. Pp. 5.
ROBINSON, E. A. G. *The problems of wage policy in war-time.* Econ. Jour., Dec., 1939. Pp. 16.
SCHIFANI, L. *Some aspects of labor with special reference to New Mexico.* New Mexico Bus. Rev., July, 1939. Pp. 7.
STEVENS, G. M. *The test of the employment relation.* Michigan Law Rev., Dec., 1939. Pp. 17.
WATT, R. J. *International Labor Conference—Session of 1939.* Am. Fed., Oct., 1939. Pp. 10.
WINANT, J. G. *The International Labour Organisation in time of war.* Internat. Lab. Rev., Oct., 1939. Pp. 3.
WOLL, M. *Labor's part in American democracy.* Vital Speeches, Dec. 1, 1939. Pp. 3.
The employment of women workers during the war. Internat. Lab. Rev., Dec., 1939. Pp. 13.
Federal programmes to assist unemployed youth in the United States. Internat. Lab. Rev., Dec., 1939. Pp. 13.
How can America put its unemployed back to work? Fortune, Oct., 1939. Pp. 29.
Labour problems in time of war. Internat. Lab. Rev., Nov., 1939. Pp. 27.
Military service and contracts of employment. Internat. Lab. Rev., Nov., 1939. Pp. 12.
The position of mobilised public servants. Internat. Lab. Rev., Dec., 1939. Pp. 13.
Regulation of employment during the war. Internat. Lab. Rev., Nov., 1939. Pp. 13.
The twenty-fifth session of the International Labour Conference. Internat. Lab. Rev., Oct., 1939. Pp. 68.
Wartime measures affecting hours of work and rest periods. Internat. Lab. Rev., Nov., 1939. Pp. 12.

Money, Prices, Credit, and Banking

ADRIANI, A. *El dilema de nuestra moneda y la situación económica Venezolana.* Rev. de Fomento, Aug., 1939. Pp. 21.

ARNDT, E. H. D. *The Pretoria mints.* So. African Jour. Econ., Sept., 1939. Pp. 15.
ATKINS, P. M. *Determining a primary reserve policy.* Bankers Mag., Nov., 1939. Pp. 4.
——————. *Secondary reserve policies and programs.* Bankers Mag., Dec., 1939, Jan., 1940. Pp. 4, 6.
BELSHAW, H. *Guaranteed prices in operation.* Econ. Record, Oct., 1939. Pp. 13.
BLIZZARD, D. H. *Analyzing industrial term loans.* Bankers Mag., Jan., 1940. Pp. 4.
BLOCH, K. *Europe's war helps Chinese dollar.* Far East. Survey, Nov. 8, 1939. Pp. 2.
——————. *Yen-bloc currencies switched from sterling to gold.* Far East. Survey, Nov. 22, 1939. Pp. 2.
BODFISH, M. *Toward an understanding of the Federal Home Loan Bank system.* Jour. Land and Pub. Util. Econ., Nov., 1939. Pp. 22.
BUSSING, I. *Split rate vs. flat rate on savings.* Bankers Mag., Jan., 1940. Pp. 4.
CAMPBELL, H. D. *The future of banking.* Bankers Mag., Nov., 1939. Pp. 2.
CORNEJO, B. *Moneda y sistema monetario.* Rev. de Econ., Año I, nos. 2 and 3, 1939. Pp. 19.
DICKENS, P. D. *Criteria for determining the creditor-debtor position of a country.* Jour. Pol. Econ., Dec., 1939. Pp. 11.
DUPRIEZ, L. H. *El equilibrio monetario internacional y la coyuntura económica.* Rev. de Fomento, Sept., 1939. Pp. 11.
E., G. *Essai sur le mécanisme des échanges monétaires.* Annales de la Soc. Sci. de Bruxelles, Apr.-Sept., 1939. Pp. 35.
EGLE, W. *The spreading of the gold points as a means of controlling the movement of foreign short-term balances.* Jour. Pol. Econ., Dec., 1939. Pp. 10.
EINZIG, P. *The unofficial market in sterling.* Econ. Jour., Dec., 1939. Pp. 8.
ELLIS, H. S. *Exchange control in Austria and Hungary.* Quart. Jour. Econ., Nov., 1939. Pp. 185.
FARLEY, M. S. *Japan to limit prices, centralize trade control.* Far East. Survey, Nov. 22, 1939. Pp. 2.
FREUND, G. and FINK, S. *Changes in central banking.* Bankers Mag., Dec., 1939. Pp. 3.
GRIMES, W. H. *Distribution and the finance company.* Harvard Bus. Rev., Winter, 1940. Pp. 8.
GROENEVELD, G. *Het monetair dilemma.* Maandschr. Econ., Nov., 1939. Pp. 16.
HANSEN, A. H. *Monetary and fiscal controls in war time.* Yale Rev., Dec., 1939. Pp. 16.
JACK, L. B. *Changing conditions in the capital markets of the United States.* Canadian Banker, Oct., 1939. Pp. 10.
KINDERSLEY, R. *British overseas investments, 1938.* Econ. Jour., Dec., 1939. Pp. 18.
KLEMME, E. M. *Industrial loan operations of the Reconstruction Finance Corporation and the federal reserve banks.* Jour. Bus. Univ. Chicago, Oct., 1939. Pp. 21.
LIEU, D. K. *The Sino-Japanese currency war.* Pacific Affairs, Dec., 1939. Pp. 14.
MASON, E. S. *The impact of the war on American commodity prices: a preliminary view.* Rev. Econ. Stat., Nov., 1939. Pp. 8.
MAYHEW, C. P. *Planned investment.* Fabian Soc., Nov., 1939. Pp. 48.
MIRY, R. *Die direkte Investition belgischer Kapitalien im Auslande.* Weltwirtsch. Archiv, Sept., 1939. Pp. 24.
MUNRO, W. B. *Banking enters the forties.* Banking, Jan., 1940. Pp. 2.
NAKATANI, M. *Deposit currency and its velocity of circulation in Japan.* Kyoto Univ. Econ. Rev., Oct., 1939. Pp. 18.
PAISH, F. W. *Note on bank window-dressing.* Economica, Nov., 1939. Pp. 5.
PALYI, M. *Should interbank balances be abolished?* Jour. Pol. Econ., Oct., 1939. Pp. 14.
PEARCE, E. L. *To improve and preserve the country bank.* Bankers Mag., Nov., 1939. Pp. 3.
PEDERSEN, A. H. *Prisernes regulering—maal og midler.* Nationaløk. Tids., 77 Bind, 5 Hefte, 1939. Pp. 26.
PHILLIPS, C. F. *Supermarket and chain-store food prices.* Jour. Bus. Univ. Chicago, Oct., 1939. Pp. 14.
PRIBRAM, K. *Residual, differential, and absolute urban ground rents and their cyclical fluctuations.* Econometrica, Jan., 1940. Pp. 17.
SARRO, E. *La deuda exterior de México: su historia, su estado actual, su liquidación.* Rev. de Hacienda, Sept., Oct., 1939. Pp. 17, 6.

SCHRAM, E. *The RFC and business loans.* Bankers Mag., Jan., 1940. Pp. 4.
STEAGALL, H. B. *Improving our banking system.* Bankers Mag., Jan., 1940. Pp. 3.
TAGGART, J. H. *Inflation possibility factors.* Bankers Mag., Dec., 1939. Pp. 3.
TOCKER, A. H. *The development of central banking.* Econ. Record, Oct., 1939. Pp. 13.
VILLARD, H. H. *A note on offset checks as a component of the money supply.* Am. Econ. Rev., Dec., 1939. Pp. 2.
WALL, N. J., and others. *The agricultural credit outlook for 1940.* Agric. Fin. Rev., Nov., 1939. Pp. 12.
WHITTLESEY, C. R. *A new instrument of central bank policy.* Quart. Jour. Econ., Nov., 1939. Pp. 3.
WIJNHOLDS, H. W. J. *Geldmenge, Umlaufsgeschwindigkeit und Preisniveau.* Weltwirtsch. Archiv, Nov., 1939. Pp. 29.
WOOLFSON, A. P. *Increasing commercial bank profits.* Bankers Mag., Dec., 1939. Pp. 4.
————. *The outlook for long-term money rates.* Bankers Mag., Jan., 1940. Pp. 4.
WOOSLEY, J. B. *Differential elements in North Carolina banking.* So. Econ. Jour., Oct., 1939. Pp. 18.
YOUNG, A. N. *On the Chinese financial front.* Foreign Affairs, Jan., 1940. Pp. 7.
Banking as a business: salient developments from 1929 to 1939. Index, N.Y. Trust Co., Winter, 1939. Pp. 12.
Germany's credit situation during the first months of the war. Weekly Rep., German Inst. for Bus. Res., Dec. 12, 1939. Pp. 4.
The progress of banking in Great Britain and Ireland during 1938. 4. The proportion of capital to deposits. Bankers' Insur. Manag. and Agents' Mag., Oct., 1939. Pp. 17.
Real estate prices and rentals. Banking, Jan., 1940. Pp. 2.

Public Finance, Taxation, and Tariff

BALLATINE, A. A. *Employment and federal finance.* Vital Speeches, Dec. 15, 1939. Pp. 3.
BARKMEIER, J. H. *Canadian tax modification.* Compar. Law Series, Dept. of Comm., Nov., 1939. Pp. 8.
BLAKEY, R. G. and BLAKEY, G. C. *Federal tax legislation, 1939.* Am. Econ. Rev., Dec., 1939. Pp. 13.
BURKHEAD, J. V. *The changing incidence of public utility taxation.* Jour. Land and Pub. Util. Econ., Nov., 1939. Pp. 8.
BURNEA, I. N. *Taxation in Rumania.* Compar. Law Series, Dept. of Comm., Sept., 1939. Pp. 17.
BUTTERS, J. K. *Discriminatory effects of the annual computation of the corporation income tax.* Quart. Jour. Econ., Nov., 1939. Pp. 22.
CHLÉPNER, B. S. *Inversiones públicas y cuyuntura económica.* Rev. de Hacienda, Oct., 1939. Pp. 8.
COUNCILOR, J. A., and others. *Federal tax revision program.* Jour. Accountancy, Nov., 1939. Pp. 19.
CRAIG, R. B. *The forest tax delinquency problem in the South.* So. Econ. Jour., Oct., 1939. Pp. 20.
CURRIER, C. E. *The effect of government land purchases on the tax structure of two counties in New Mexico.* New Mexico Bus. Rev., Oct., 1939. Pp. 6.
DOBRINER, H. G. *An outline of Germany's experience in taxing persons with small incomes.* Bull. Nat. Tax Assoc., Dec., 1939. Pp. 16.
EISNER, M. *Congress again faces the tax question.* Vital Speeches, Nov. 15, 1939. Pp. 2.
ELLIS, P. W. *Note on taxes and the consumer—a Gestalt analysis.* Am. Econ. Rev., Dec., 1939. P. 1.
GARDNER, E. J. *Delinquent taxes in Ohio, real property, general taxes and special assessments for improvements and betterments.* Bull. Nat. Tax Assoc., Oct., 1939. Pp. 14.
GREGORIOU, S. *Relations de la Banque de Grèce avec l'état. Services speciaux de la banque envers l'état.* II. Rev. des Sci. Econ. et Finan., July-Dec., 1939. Pp. 34.
HILDEBRAND, G. H., JR. *Public investment and the capital budget.* Plan Age, Oct., 1939. Pp. 13.

HOLT, L. W. *Public finance and control of investment in New Zealand.* Econ. Record, Oct., 1939. Pp. 11.

KALIJARVI, T. V. *Taxation and the common man.* Bull. Nat. Tax Assoc., Nov., 1939. Pp. 3.

KIMMEL, L. H. *The burden of taxation and public debt in the United States and other countries, 1913-1938.* Conf. Bd. Econ. Record, Nov. 3, 1939. Pp. 11.

———. *The federal fiscal situation.* Conf. Bd. Econ. Record, Oct. 20, 1939. P. 1.

LONG, H. F. *Legislative trends with summary of proposals for tax laws before the 1939 legislative sessions of the New England states.* Bull. Nat. Tax Assoc., Nov., 1939. Pp. 6.

———. *Publications relating to taxation or public finance—reviews and notes.* Bull. Nat. Tax Assoc., Dec., 1939. Pp. 3.

MAGILL, R. *Trends in public finance.* Vital Speeches, Dec. 1, 1939. Pp. 5.

MASSELL, M. *Some aspects of capital and current budgets for the federal government.* Plan Age, Oct., 1939. Pp. 8.

MCFARLAND, W. B. *The federal income tax revisions of 1939.* New Mexico Bus. Rev., Oct., 1939. Pp. 5.

RUDLCK, H. J. *Section 102 and personal holding company provisions of the internal revenue code.* Yale Law Jour., Dec., 1939. Pp. 53.

RUML, B. *The business man's interest in national fiscal policy.* Advanced Manag., Fall, 1939. Pp. 4.

STEWART, J. *Five years of the income tax in New Mexico.* New Mexico Bus. Rev., Oct., 1939. Pp. 12.

WINTERS, R. A. and CLARK, H. *The incidence of pay roll taxes: comment.* Quart. Jour. Econ., Nov., 1939. Pp. 4.

WOLFF, R. P. *The chains adjust themselves to state taxation.* Dun's Rev., Oct., 1939. Pp. 7.

WUELLER, P. H. *Concepts of taxable income—the Italian contribution.* Pol. Sci. Quart., Dec., 1939. Pp. 21.

Financing the war. Bankers' Insur. Manag. and Agents' Mag., Nov., 1939. Pp. 9.

Regional variations in retailers' tax payments. Dun's Rev., Nov., 1939. P. 1.

Sir John Simon's war budget. Bankers' Insur. Manag. and Agents' Mag., Nov., 1939. Pp. 17.

Swedish-American double tax treaty. Compar. Law Series, Dept. of Comm., Oct., 1939. Pp. 11.

War taxes. Tax Policy, Oct., 1939.

Population and Migration

BARNES, J. A. and ROBINSON, A. H. *A new method for the representation of dispersed rural population.* Geograph. Rev., Jan., 1940. Pp. 4.

BARNES, K. *Siberian population mounts 30 per cent in twelve years.* Far East. Survey, Jan. 3, 1940. P. 1.

BLADEN, V. W. *The population problem.* Canadian Jour. Econ. and Pol. Sci., Nov., 1939. Pp. 20.

DANIEL, G. H. *Labour migration and fertility.* Sociological Rev., Oct., 1939. Pp. 31.

HORNEDO, E. *Los cambios en la población modifican la organización económica.* Rev. de Hacienda, Oct., 1939. Pp. 2.

HURD, W. B. *Some implications of prospective population changes in Canada.* Canadian Jour. Econ. and Pol. Sci., Nov., 1939. Pp. 12.

NEALE, E. P. *Population prospects and problems in New Zealand.* Econ. Record, Oct., 1939. Pp. 13.

PELLETIER, A. J. *Tentative population schedule for the 1941 census of Canada.* Canadian Jour. Econ. and Pol. Sci., Nov., 1939. Pp. 4.

SMITH, M. and ROBERT, P. A. *An examination of some of A. G. Sundbarg's hypotheses of age distribution of population with special reference to the United States.* Social Forces, Dec., 1939. Pp. 14.

SPENGLER, J. J. *Moheau: prophet of depopulation.* Jour. Pol. Econ., Oct., 1939. Pp. 30.

WALTER, P., JR. *Rural-urban migration in New Mexico.* New Mexico Bus. Rev., July, 1939. Pp. 6.

WEAVER, R. C. *Economic factors in negro migration—past and future.* Social Forces, Oct., 1939. Pp. 12.

Social Problems and Reforms

ASHBY, A. W. *The effects of urban growth on the countryside.* Sociological Rev., Oct., 1939. Pp. 25.

ASPLUND, R. F. *In what fields of government can citizens' groups be most constructive?* New Mexico Bus. Rev., Oct., 1939. Pp. 3.

COLE, M. *The progress of government control.* Fabian Quart., Autumn, 1939. Pp. 17.

COONS, A. G., and others. *Government expansion in the economic sphere.* Annals Am. Acad. Pol. and Soc. Sci., Nov., 1939. Pp. 170.

DAVISON, R. L. *How can we solve the housing riddle?* Dun's Rev., Oct., 1939. Pp. 7.

DAYKIN, W. L. *The rôle of recent labor legislation in modern economic society.* Am. Fed., Dec., 1939. Pp. 9.

DICKINS, D. *Some contrasts in levels of living in industrial, farm, and part-time farm families in rural Mississippi.* Social Forces, Dec., 1939. Pp. 9.

DURHAM, G. H., and others. *Intergovernmental relations in the United States.* Annals Am. Acad. Pol. and Soc. Sci., Jan., 1940. Pp. 184.

ECHAVARRÍA, J. M. *La investigación social en los Estados Unidos.* Rev. Mexicana de Soc., July-Aug., 1939. Pp. 23.

EDWARDS, C. D. *Anti-trust action and American housing.* Jour. Land and Pub. Util. Econ., Nov., 1939. Pp. 8.

FALK, I. S., and others. *Medical care.* Law and Contemp. Problems, Autumn, 1939. Pp. 181.

GIBSON, A. H. *Social services.* Bankers' Insur. Manag. and Agents' Mag., Oct., 1939. Pp. 17.

GOW, J. S. *War—its economic impact on the United States.* Vital Speeches, Dec. 1, 1939. Pp. 4.

HEIMANN, E. *Building our democracy.* Soc. Research, Nov., 1939. Pp. 10.

HIRSH, J. *The compulsory health insurance movement in the United States.* Social Forces, Oct., 1939. Pp. 13.

KETTERING, C. F. *The effect of the emergency on scientific and industrial progress.* Vital Speeches, Nov. 15, 1939. Pp. 2.

LAMONT, T. W. *American business in war and peace.* Vital Speeches, Dec. 1, 1939. Pp. 3.

MASLOW, H. *Group hospitalization.* Am. Fed., Oct., 1939. Pp. 5.

MCCAFFREY, G. H. *Proportional representation in New York City.* Am. Pol. Sci. Rev., Oct., 1939. Pp. 12.

O'GRADY, J. *The relationship of social work to government today.* Catholic Charities Rev., Oct., 1939. Pp. 3.

RICHARDS, C. S. *Some factors in the economy of war—pricing, rationing, "profiteering" and control.* So. African Jour. Econ., Sept., 1939. Pp. 13.

ROCCA, J. C. *Social security in Italy.* Am. Fed., Dec., 1939. Pp. 10.

SPAHR, W. E. *The relation of government to business.* Vital Speeches, Dec. 15, 1939. Pp. 6.

STEIN, R. M. *Workers' education: today's challenge.* Harvard Bus. Rev., Winter, 1940. Pp. 8.

SUTCH, W. B. *Social services in New Zealand.* Econ. Record, Oct., 1939. Pp. 7.

WATT, R. J. *Labor's viewpoint on occupational disease prevention.* Am. Fed., Dec., 1939. Pp. 8.

Allowances for families of mobilised men. Internat. Lab. Rev., Nov., 1939. Pp. 11.

Great Britain's economic war risks empire and financial reserves abroad. Weekly Rep., German Inst. for Bus. Res., Oct. 19, 1939. Pp. 3.

Real estate vacancies in Denver as of September, 1939. Univ. Denver Rep., Nov., 1939. Pp. 12.

Insurance and Pensions

ALTMEYER, A. J. *The significance of the social security amendments.* Catholic Charities Rev., Nov., 1939. Pp. 3.

DANIELS, H. J. *Summary of war risk insurance legislation.* Compar. Law Series, Dept. of Comm., Dec., 1939. Pp. 8.

LOER, K. *Gruppenversicherung gegen Durchschnittsprämie* (Entgegnung hierauf Paul Lorenz). Blätter f. Versicherungs-Math., Oct., 1939. Pp. 6.

MALISOFF, H. *The emergence of unemployment compensation.* Pol. Sci. Quart., Dec., 1939. Pp. 23.

PUTZ, T. *Kapitalmarkt und Versicherungswirtschaft.* Zeitschr. f. die Ges. Versicherungs-Wiss., Oct., 1939. Pp. 9.

ROHRBECK, W. *Versicherungsgemeinschaft oder versicherte Gruppe?* Zeitschr. f. die Ges. Versicherungs-Wiss., Oct., 1939. Pp. 5.

SAXE, M. *Unemployment compensation plans.* Banking, Jan., 1940. Pp. 2.

Adjustment of social insurance schemes to war conditions. Internat. Lab. Rev., Dec., 1939. Pp. 16.

Pauperism, Charities, and Relief Measures

SCHNEIDER, D. M. *The place of research in the long-time planning of a state program for public welfare.* Jour. Am. Stat. Assoc., Dec., 1939. Pp. 9.

Socialism and Coöperative Enterprises

RAMÍREZ CABAÑAS, J. *La orientación del movimiento cooperativo en Mexico.* Rev. de Hacienda, Aug., 1939. Pp. 7.

ZORBAUGH, G. S. M. *Consumers' coöperation in Great Britain—a notable economic survey.* Am. Fed., Oct., 1939. Pp. 6.

Statistics and Its Methods

BOLDRINI, M. *Sull' impiego investigativo dello schema probabilistico di Poisson.* Giorn. d. Econ., May-June, 1939. Pp. 19.

COHEN, J. B. and FIRESTONE, J. M. *On an experiment in the teaching of statistics.* Jour. Am. Stat. Assoc., Dec., 1939. Pp. 2.

DIEULEFAIT, C. E. *Cálculo de algunos momentos.* Rev. de Ciencias Econ., Sept., 1929. Pp. 6.

DRUMMOND, G. F. *Variations in cost.* Canadian Jour. Econ. and Pol. Sci., Nov., 1939. Pp. 13.

FALKNER, R. P. *Methods and problems of evaluating wealth.* Conf. Bd. Econ. Record, Oct. 5, 1939. Pp. 4.

———. *The nature of wealth.* Conf. Bd. Econ. Record, Oct. 5, 1939. Pp. 2.

———. *New estimates of the national wealth and of its state distribution, 1922-1937.* Conf. Bd. Econ. Record, Oct. 5, 1939. Pp. 11.

GOSNELL, F. A. *The 1939 census of business gets under way.* Jour. Am. Stat. Assoc., Dec., 1939. Pp. 7.

KING, W. I. *Can production of automobiles be stabilized by making their prices flexible?* Jour. Am. Stat. Assoc., Dec., 1939. Pp. 11.

MARSCHAK, J. *On combining market and budget data in demand studies: a suggestion.* Econometrica, Oct., 1939. Pp. 4.

MARTINOTTI, P. *Estensioni nel concetto di media.* Giorn. d. Econ., July-Aug., 1939. Pp. 9.

MENDERSHAUSEN, H. *Eliminating changing seasonals by multiple regression analysis.* Rev. Econ. Stat., Nov., 1939. Pp. 7.

MENGARELLI, C. *Teorie sull'induzione statistica.* Riv. Internaz. di Sci. Soc., Sept., 1939. Pp. 13.

MITCHELL, W., JR. *Factors affecting the rate of return on mailed questionnaires.* Jour. Am. Stat. Assoc., Dec., 1939. Pp. 10.

PALMER, G. L. *The convertibility list of occupations and the problems of developing it.* Jour. Am. Stat. Assoc., Dec., 1939. Pp. 16.

ROOS, C. F. and VON SZELISKI, V. *The concept of demand and price elasticity—the dynamics of automobile demand* (with a rejoinder by W. I. King and a further reply by C. F. Roos and V. von Szeliski). Jour. Am. Stat. Assoc., Dec., 1939. Pp. 15.

SMITH, J. H. *Tests of significance: what they mean and how to use them.* Jour. Bus. Univ. Chicago, part 2, Oct., 1939. Pp. 90.

SNEDECOR, G. W. *Design of sampling experiments in the social sciences.* Jour. Farm Econ., Nov., 1939. Pp. 10.

STOCK, J. S. *A method of graphic interpolation.* Jour. Am. Stat. Assoc., Dec., 1939. Pp. 5.

SWEEZY, M. Y. *Distribution of wealth and income under the nazis.* Rev. Econ. Stat., Nov., 1939. Pp. 7.

TINBERGEN, J. *The dynamics of share-price formation.* Rev. Econ. Stat., Nov., 1939. Pp. 8.

WALD, A. *A new formula for the index of cost of living.* Econometrica, Oct., 1939. Pp. 13.

WISHART, J. *Some aspects of the teaching of statistics* (with discussion). Jour. Royal Stat. Soc., part iv, 1939. Pp. 33.

NOTES

The Nominating Committee of the AMERICAN ECONOMIC ASSOCIATION has been appointed: John M. Clark, Columbia University, chairman; William C. Clark, Ottawa, Canada; Corwin D. Edwards, Federal Trade Commission; Harold M. Groves, University of Wisconsin; Earl J. Hamilton, Duke University; John Parke Young, Occidental College. Members are invited to send to the committee the names of persons whom they would like to have considered for the elective offices—president, vice-president, second vice-president and two members of the Executive Committee.

The following names have been added to the membership of the AMERICAN ECONOMIC ASSOCIATION since November 1:

Arthur, H. B., Swift & Co., General Office, Union Stock Yards, Chicago, Ill.
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Woodbridge, F. W., 2326 Scarff St., Los Angeles, Calif.
Woods, R. M., Saint Mary's College, Winona, Minn.
Wright, D. M., Colonnade Club, University of Virginia, Charlottesville, Va.
Wyckoff, V. J., University of Maryland, College Park, Md.

The Pacific Coast Economic Association has elected the following officers: Arthur G. Coons, Claremont Colleges, president; Carl S. Dakan, University of Washington, vice-president; Hampton K. Snell, University of Southern California, secretary-treasurer; Calvin Crumbaker, University of Oregon, editor.

At the eighteenth annual conference of the Pacific Coast Economic Association, held at the State College of Washington and the University of Idaho December 27-29, 1939, papers were read as follows: "The Oregon Anti-Picketing Legislation," by William C. Jones, Willamette University; "The Loyal Legion of Loggers and Lumbermen," by William C. Moore, University of Idaho; "The Economics of the Fair Labor Standards Act," by F. W. Clower, State College of Washington; "Regional Aspects of the Level of Employment," by Robert Terrill, Reed College; "The Present Status of the Theory of Capital," by Floyd F. Burtchett, University of California at Los Angeles; "Capitalization Principle and Depreciation Charges," by Arthur H. Lorig, University of Washington; "The Accountants' Provision for Depreciation and Its Effect on Prices," by Eustace LeMaster, Spokane, Washington; "Depreciation Policy in Periods of Declining Output," by Perry Mason, University of California; "The Economics of Security," presidential address, by Richard B. Heflebower, State College of Washington; "The Sales Tax as a Revenue Measure in Depression Periods," by Malcolm M. Davisson, University of California; "Tax Immunities and Tax Exemptions," by Rex Ragan, University of Southern California; "The Use of Technical Aids in the Assessment of Property," by T. S. Hedges, Washington State Tax Commission; "A Preliminary View of the Work of the Temporary National Economic Committee," by Maurice W. Lee, Utah State Agricultural College; "Rigid Prices, the Evidence Examined," by Robert B. Pettengill, University of Southern California; "Monopolistic Aspects of Trade Unionism," by Morrison Hansaker, Occidental College; "The Status of Institutional Economics," by William E. Folz, University of Idaho; "Erratic Expectations and Money Rates of Interest," by E. S. Shaw, Stanford University; "Statistical Concepts and the Theory of Cost," by G. F. Drummond, University of British Columbia.

The allied social science associations are being served by the following officers during the present year:

American Economic Association—Frederick C. Mills, Columbia University, president; James Washington Bell, Northwestern University, secretary.
American Accounting Association—George A. MacFarland, University of Pennsylvania, president; Henry T. Chamberlain, Loyola University, secretary.
American Association for Labor Legislation—Joseph P. Chamberlain, Columbia University, president; John B. Andrews, American Labor Legislation Review, 131 East 23rd Street, New York City, secretary.
American Association of University Teachers of Insurance—David McCahan, University of Pennsylvania, president; Chester A. Kline, University of Pennsylvania, secretary.
American Farm Economic Association—H. B. Price, University of Kentucky, president; Asher Hobson, University of Wisconsin, secretary.

AMERICAN MARKETING ASSOCIATION—Donald R. G. Cowan, Swift & Company, Chicago, president; Albert Haring, Indiana University, secretary.
AMERICAN POLITICAL SCIENCE ASSOCIATION—Robert C. Brooks, Swarthmore College, president; Kenneth Colegrove, Northwestern University, secretary.
AMERICAN SOCIOLOGICAL SOCIETY—Robert M. MacIver, Columbia University, president; Harold A. Phelps, University of Pittsburgh, secretary.
AMERICAN STATISTICAL ASSOCIATION—F. Leslie Hayford, General Motors Corporation, New York City, president; Frederick F. Stephan, 1626 K Street, N.W., Washington, D.C., secretary.
ECONOMETRIC SOCIETY—Joseph A. Schumpeter, Harvard University, president; Alfred Cowles, Cowles Commission, University of Chicago, secretary.
INSTITUTE OF MATHEMATICAL STATISTICS—S. S. Wilks, Princeton University, president, P. R. Rider, Washington, secretary.
TAX POLICY LEAGUE—Harold S. Buttenheim, Editor, *The American City,* president; Miss Mabel L. Walker, Tax Policy League, 309 East 34th Street, New York City, secretary.

At the midyear meeting of the Mississippi Valley Historical Association held at Washington December 28-30, papers were read as follows: "The Railroads as a Social Force," by Richard C. Overton, Chicago, Burlington and Quincy Railroad; "The Railroads as an Economic Force," by Leland H. Jenks, Wellesley College; "The Railroads and the Scope of Government Activity," by Edward G. Campbell, National Archives.

A memorial meeting in honor of Professor Edwin R. A. Seligman, McVickar professor of political economy at Columbia University, was held December 13, 1939, at the Low Memorial Library. Addresses were made by President Butler, Alvin S. Johnson, Robert Murray Haig, James T. Shotwell, Mary K. Simkhovitch, and Mabel P. H. Lee.

Because of the war, the session of the International Statistical Institute scheduled to be held May 10-18, 1940, has been indefinitely postponed. The eighth American Scientific Congress will be held in Washington as scheduled on these dates; and a statistical section has been added to this Congress as a substitute for the meeting of the International Statistical Institute.

The second Conference on Consumer Education will be held at Stephens College, Missouri, April 1-3.

The twenty-second annual meeting of the American Association of Collegiate Schools of Business will be held at the University of Texas, Austin, April 18-20.

Announcement is made of the Public Service Fellowship established in 1934 by the former Women's Organization for National Prohibition Reform. This Fellowship offers a sum of $1,300 for a year of graduate study at an approved college or university in one or more of the related fields of economics, government, history and sociology. The award is made annually by the faculty of Barnard College to a woman who has graduated within the past five years and who shows promise of usefulness in public service. Further information may be obtained from Professor Maude A. Huttman, Barnard College, Columbia University.

The original records of Brook Farm are being edited for publication by Arthur E. Bestor, Jr., assistant professor of history at Columbia University. The editor solicits the aid of collectors in locating manuscripts, particularly

letters written from Brook Farm or diaries kept by members of the community. Address Arthur E. Bestor, Jr., Box 386, Teachers College, Columbia University.

James E. Gould, professor of transportation in the College of Economics and Business at the University of Washington, died November 11, 1939.

Max S. Handman, professor of economics at the University of Michigan, died December 26, 1939.

Appointments and Resignations

Wendell M. Adamson has been promoted from the rank of instructor to that of assistant professor of statistics at the University of Alabama.

Paul E. Alyea has been promoted from assistant professor to associate professor of economics at the University of Alabama.

A. E. Andress, formerly instructor in economics at Princeton University, is assistant professor of economics at Hiram College.

J. Douglas Brown, professor of economics and director of the Industrial Relations Section of Princeton University, is on sabbatical leave for the second term of this year, studying current problems in industrial relations and social insurance. He will also deliver lectures on social security at Johns Hopkins University.

Henry A. Burd has resumed his duties as professor of marketing in the College of Economics and Business at the University of Washington after an absence of one quarter.

H. H. Chapman, director of the University of Alabama Bureau of Business Research, has been appointed a member of the Employer-Experience Rating Committee of the Department of Industrial Relations of the State of Alabama.

J. B. Condliffe, formerly of the London School of Economics, is professor of international trade at the University of California, Berkeley, succeeding Dr. Henry F. Grady, who resigned two years ago.

A. C. Dambrun, formerly assistant in economics at Princeton University, is instructor in economics at Montana State University.

George M. Dougherty, Jr., of the University of Pennsylvania is acting instructor of transportation in the College of Economics and Business at the University of Washington.

Paul H. Douglas of the University of Chicago has been elected a member of the Chicago City Council for a term of four years.

Roy L. Garis of Vanderbilt University will be a visiting professor at the University of Southern California in the department of economics for the summer session of 1940.

Anton deHaas of the Graduate School of Business Administration of Harvard University, will be a visiting professor at the University of Southern California in the department of economics for the summer session of 1940.

Everett D. Hawkins of Mount Holyoke College has been granted a semester's leave of absence during which he will be visiting professor in the Industrial Relations Section of the California Institute of Technology.

K. Helleiner of Vienna has been attached to the department of political economy of the University of Toronto.

Paul T. Homan of Cornell University will deliver lectures on competition, government regulation and social control as visiting lecturer at Johns Hopkins University during the second semester.

Everette N. Hong has been appointed lecturer in economics for 1939-1940 at the University of Southern California.

Hiram L. Jome of DePauw University will be acting professor of economics and finance at the University of Missouri during the coming summer session.

Chester H. Knight has been promoted from associate professor of accounting to professor at the University of Alabama.

F. A. Knox is acting chairman of the department of economics at Queen's University, Canada.

S. Owen Lane has been appointed teaching assistant at the University of Southern California for 1939-1940.

Richard A. Lester has resumed his duties in the College of Economics and Business at the University of Washington.

Gertrud Lovasy of Vienna is a visiting lecturer at Wellesley College during the month of March.

Donald H. Mackenzie of the University of Washington has been granted leave of absence to take a position for the second semester at the Graduate School of Business Administration of Harvard University.

W. A. Mackintosh, professor of economics at Queen's University, Canada, has been granted a leave of absence for the duration of the war in order to be special assistant to the Deputy Minister of Finance, Ottawa.

C. Ward Macy of the economics staff of Coe College, has been appointed chairman of the recently established division of social sciences.

Vernon A. Mund, professor of economics in the College of Economics and Business at the University of Washington, has been granted a leave of absence for the spring quarter of 1940 to make a field study of industrial prices.

Millard Peck of the United States Department of Agriculture became on July 1, 1939, the regional leader of the Division of Land Economics, Bureau of Agricultural Economics, having charge of the field work of the Division of Land Economics in both the northern and southern Great Plains, with headquarters at Lincoln, Nebraska.

John A. Pfanner, Jr., instructor in business organization and management, has been promoted to the rank of assistant professor at the University of Nebraska.

Lloyd P. Rice has resumed his teaching in Dartmouth College after a leave of one and one-half years to serve as financial adviser to the Philippine Government in connection with a revision of tax systems.

I. L. Sharfman, professor of economics at the University of Michigan, is on a sabbatical leave during the second semester of the present academic year.

Donald P. Sherman has been promoted from assistant professor to associate professor of economics at Michigan College of Mining and Technology.

R. G. H. Smails is co-director of the School of Commerce at Queen's University, Canada.

Frank H. Sparks is lecturer in economics for 1939-1940 at the University of Southern California.

William A. Spurr has been appointed acting chairman of the department of business research in the University of Nebraska.

Wendell P. Trumbull has been appointed lecturer in accounting and management at the University of Washington for the period from February to July, 1940.

Roland S. Vaile of the University of Minnesota is serving as economic consultant with Cargill, Inc., grain merchants of Minneapolis.

C. E. Walker is co-director of the School of Commerce at Queen's University, Canada.

N. Wollman, formerly assistant in economics at Princeton University, is instructor in economics at Colorado College.

William H. Wynne has been appointed associate professor of economics at the University of Michigan for the second semester of the present academic year.

Transportation and Communication

Trade, Commerce, and Commercial Crises

Accounting, Business Methods, Investments and the Exchanges

Capital and Capitalistic Organization

Labor and Labor Organizations

Money, Prices, Credit, and Banking

Public Finance, Taxation, and Tariff

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Social Problems and Reforms

Insurance and Pensions

Statistics and Its Methods

Officers of the American Economic Association

THE AMERICAN ECONOMIC REVIEW is published four times a year, in March, June, September, and December, at 450 Ahnaip St., Menasha, Wisconsin.
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Books for review should be sent to the Managing Editor.
Publication offices of the AMERICAN ECONOMIC REVIEW, 450 Ahnaip St., Menasha, Wisconsin, and Evanston, Illinois. Office of the Secretary of the American Economic Association, Northwestern University, Evanston, Illinois. Membership dues are five dollars a year; life membership, two hundred dollars.
THE AMERICAN ECONOMIC REVIEW is sent to all members of the American Economic Association as one of the privileges of membership, $4.00 of the annual membership dues being in payment of a year's subscription to the publication.

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TOWARD A CONCEPT OF WORKABLE COMPETITION

The paper of which this is an enlarged and revised version was read at a joint Round Table of the American Economic Association and the Econometric Society, during the meetings at Philadelphia, December, 1939.

Where one of the conditions of perfect competition is absent, the presence of others may lead to greater rather than less imperfection. Long-run curves of individual demand and cost are flatter than commonly represented, and the imperfections of competition correspondingly less. Industry subject to fluctuating demand requires prices in excess of short-run marginal cost. Favorable conditions appear to include a sloping individual demand curve, and some uncertainty whether a reduction of price will be promptly met.

With standardized products, a chaotic market tends toward ruinous competition. Pure oligopoly is seldom found; the important case being that of openly-quoted prices with varying amounts of deviations on actual sales. Standard products with sloping individual demand curves are also possible.

While extreme quality differentials approach monopoly, more moderate ones may be workably competitive, especially with further growth of closer substitutes and better knowledge of qualities on the part of buyers.

I. *Introduction*

Theories of imperfect and "monopolistic" competition have for some time been current, in an unformulated state, in the field of economic policy; and important beginnings have been made at formulation by economic theorists. As a necessary step in this last development, the conception of "perfect competition" has itself for the first time received really specific definition and elaboration. With this has come the realization that "perfect competition" does not and cannot exist and has presumably never existed, for reasons quite apart from any inescapable tendency toward collusion, such as Adam Smith noted in his familiar remark on the gettings-together of members of a trade. What we have left is an unreal or ideal standard which may serve as a starting point of analysis and a norm with which to compare actual competitive conditions. It has also served as a standard by which to judge them.

I am not quarreling with proper use of this standard as an ideal. However, it has seemed at times to lead to undesirable results, in that it does not afford reliable guidance to the factors which are favorable to the closest available working approximation to that ideal, under actual conditions. With this problem the present paper is concerned.

The theory of the subject has defined for us the results of various forms of imperfect competition—some of the results being still debatable. It has

defined these results in abstract terms which might be quantitative if the controlling functions could be measured, but which in the absence of such measurement remain qualitative, indicating to most minds chiefly the *direction* of departure from the standard of "perfect competition." There has been some speculation as to the amount and seriousness of these departures, but no very definite conclusions. And there has been speculation as to ways of reducing the imperfections, chiefly in specific cases.

It seems that a contribution might be made to this process, of an orienting sort, by attempting to formulate concepts of the most desirable forms of competition, selected from those that are practically possible, within the limits set by conditions we cannot escape. This would at least be an antidote to mere "historic homesickness"; but might render a more positive service. For some of the features listed as "imperfections" in our present theoretical scheme may turn out to have some positive use in actual situations. It would be a truism to say that the most effective forms of competition we have, or can have, are imperfect forms, since there are no others. But it will mean something if we can find, after due examination, that some of these forms do their jobs well enough to be an adequate working reliance —more serviceable, on the whole, than those substitutes which involve abandoning reliance on competition. And it will be useful if we can learn something about the kinds and degrees of "imperfection" which are positively serviceable under particular conditions.

One central point may be put abstractly. If there are, for example, five conditions, all of which are essential to perfect competition, and the first is lacking in a given case, then it no longer follows that we are necessarily better off for the presence of any one of the other four. In the absence of the first, it is *a priori* quite possible that the second and third may become positive detriments; and a workably satisfactory result may depend on achieving some degree of "imperfection" in these other two factors.

Suppose the first requisite is perfect two-way mobility of the factors of production, with no specialized and irrecoverable fixed capital. Granted this, an industry can stand the most rigorous conditions in all other respects. It may have a multitude of small producers, who produce a supply and then place it on a market for what it will bring instead of quoting a price and seeing how much they can sell at that price; and it may produce a standardized commodity, so that individual demand curves are infinitely elastic: but efficient producers will still cover their total costs of production. Take away the saving grace of perfect two-way mobility and leave the other conditions; let demand decline, and competition becomes too strong: you have a "sick industry" on your hands. Reduce the number of producers and let them sell on quoted prices and anticipate one another's reactions and you have a form of "oligopoly." Change one more condition, substituting a chaotically im-

perfect market in which irregular, temporarily secret and discriminatory pricing is the rule rather than the exception and you have (whenever demand decreases or fails to grow as anticipated) a situation tending strongly to degenerate into a cut-throat price war, driving prices below an efficient producer's total cost of production, though, if producers are few and large, this condition is not likely to be permanent.[1]

These examples are merely illustrative. They point toward a thesis, which finds reflection in the apparent confusion of our present policies (trying to raise some prices and lower others)—namely, that imperfect competition may be too strong as well as too weak; and that workable competition needs to avoid both extremes.

II. *Competition and Its Forms*

By way of a generic definition of competition in price between business units and sellers, we might consider the following.

> Competition is rivalry in selling goods, in which each selling unit normally seeks maximum net revenue, under conditions such that the price or prices each seller can charge are effectively limited by the free option of the buyer to buy from a rival seller or sellers of what we think of as "the same" product, necessitating an effort by each seller to equal or exceed the attractiveness of the others' offerings to a sufficient number of sellers to accomplish the end in view.

This is not a complete definition, but brings out certain features crucial to the following argument. Specifically, it is not limited (as are some current implied definitions) to cases in which one seller succeeds in excelling the offerings of others; and it focuses attention on a crucial point which is sometimes neglected—namely the nature of the option actually open to the buyer.

The specific character of competition in any given case depends on a surprisingly large number of conditions—so many, in fact, that the number of mathematically possible combinations runs into the hundreds or thousands—and suggests the possibility that every industry may be in some significant respect different from every other, or from itself at some other stage of development. At least ten conditioning factors appear worth noting, within each of which there are a number of variants or gradations.

1. *The standardized or unstandardized character of the product.* Standardization may be so complete that an open market tolerates no price-differential between different sellers at any one point of purchase, or it may tolerate moderate quality-differentials which are in effect subject to competitive forces, or the differentials may be large and subject to little or no competitive check. The commodity may be standardized while services rendered in connection with it permit some price differential, or it may be standardized by segregation of "seconds."

[1] These conditions are sufficiently familiar to permit the reader to fill in the gaps in the above shorthand statement of the conditions necessary to these various results.

2. *The number and size-distribution of producers.* There may be many, all small, or few, all large, or a few large and numerous small, in which case the large producers may or may not be the "dominant" factor in the market.
3. *The general method of price-making.* The producer may create a supply and then sell it at whatever the market will bring ("supply-governed price"); or he may quote a price and sell what he can at that price until he sees fit to change it ("quoted price"). In the latter case, he may produce to stock or to order. Or he may sell on sealed bids.
4. *The general method of selling.* Sale may be by brokers in a produce-market, by exclusive agents, through general dealers or direct *via* traveling salesmen or by mail.
5. *The character and means of market information.*
6. *The geographical distribution of production and consumption.* This is important where transportation cost is a material factor.
7. *The degree of current control of output.* Production may be seasonal, or non-seasonal with a significant lag between the initiation of a change in the rate of production and the resulting change in supply available for sale, or inventory-changes may be sufficient to cushion the effect of this lag and so minimize its importance.
8. *Variation of cost with varying size of plant or enterprise.*
9. *Variation of cost with short-run fluctuations of output.*
10. *Flexibility of productive capacity.* Increase may be easy and rapid, or difficult and slow; while rapid decrease may be virtually impossible, owing to fixed capital investment.

The following outline, which is tentative and admittedly incomplete, attempts to take account of some of the more important conditioning factors, selecting as the basis for the main heads those which appear to have more effect on price behavior. The distinction between "quoted" and "supply-governed" prices has already been defined, and appears to deserve an important place. The term "quoted" is used instead of "administered" because the latter term carries implications of some degree of discretionary control, which may not always accompany the mere quoting of a price. For "supply-governed" the phrase "market-made" might be used to indicate that the making of the price quotations is literally *done by* the market machinery (as on a produce exchange) instead of being merely conditioned or controlled by it; but it seemed desirable to avoid any possible implication that the only real markets are those of the produce-exchange type, and to use terms consistent with a more inclusive concept of a market. A producer who does not sell his goods on a produce exchange or the equivalent might be surprised to be told that he had no market for them at all. The outline is herewith presented, with apologies for the amount of familiar material it contains. Its indebtedness to Professor Chamberlin is obvious.

I. *Pure (rigorous, unmitigated) competition.* Requisites: standard product, known price, many sellers available at any locality, free entry. Price may be quoted or supply-governed. Price tends to equal marginal cost.
   A. *Perfect competition.* Probably the outstanding requisite, in addition to

the above, is perfect two-way mobility of the factors of production; also assumptions as to cost-behavior and relationships consistent with the continued presence of many sellers. Current control of output is probably implied. Price covers average cost, which equals marginal cost.

B. *Imperfect pure competition.* Lacking perfect mobility, marginal cost is less than average cost when demand at average-cost prices falls below capacity.
   1. Output currently controllable by each producer.
      a. Capacity such that price exceeds average cost at peaks of demand, and covers cost on average of fluctuations.
      b. Conditions such that average price is less than this. ("Sick industry" problem; ex., bituminous coal-mining.)
   2. Output not currently controllable (ex., agriculture). This includes the problems giving rise to the "cobweb theorem," and related problems. Sub-heads a and b as above. (Under b, "sick industries"; ex., unregulated agriculture.)

II. *Modified, intermediate or hybrid competition.* ("Monopolistic competition" in the broader sense.)
   A. Standard products, few producers. The most important cases involve formally free entry, but no exit without loss.
      1. Quoted prices, horizontal individual demand schedules if others' prices unchanged, and variants.
         a. Open price, perfectly conformed to (rarely found): *first species of oligopoly.*
         b. Imperfectly-known price and chaotic discrimination.
            (1) Enduring ignorance: local near-monopolies.
            (2) Temporary ignorance: tendency to "cut-throat competition."
         c. Open price with limited departures, all or part of the time: secrecy temporary. Probably the most important case.
      2. Supply-governed prices (implies an open market). Individual demand schedules sloping, but more elastic than general demand schedule: *second main species of oligopoly.*
      3. Quoted prices, sloping individual demand schedules.
         a. Demand schedules definite and calculable (spatially separated producers with uniform mill prices). May result in a third species of oligopoly.
         b. Demand schedules indefinite (ex., above condition with limited freight absorption).
   B. Unstandardized or quality products: *"monopolistic competition."* Individual demand schedules sloping, but more elastic than general demand schedule.[2] Importance of competitive element hinges largely on extent to which quality differences are open to free imitation. Schedule of response to selling outlay a complicating factor.
      1. Quoted prices; single producer's product usually standardized or graded, with separate disposal of "seconds."
      2. Supply-governed prices; price-differentials for quality made directly in market. For agricultural products number of suppliers usually nullifies any monopoly element.

[2] For this purpose the "general demand schedule" would presumably have to be defined in terms of the response of sales to simultaneous and proportionate changes in the prices of all the grades or sub-species of "the commodity" in question.

Certain competitive categories cross the divisions of this outline. For example, "imperfect competition" covers headings I, B, and II. What may be called "atomistic competition" covers heading I, and an undivided share of the cases under II, B, though it may be noted that the outline suggests some reservation as to whether atomistic competition in the sale of quality products deserves the designation "monopolistic competition."

Among the omissions from the outline are the effects of durability *versus* perishability of products; and most of the complications of cost-behavior, including the problem of joint *versus* separable costs. And it may be that a separate set of headings should have been devoted to retail selling, which presents special problems. For instance, even physically identical commodities need not sell at identical prices in neighboring stores. This fact could be forced into the headings of the outline, but might better be separately dealt with. Most important, perhaps, the outline makes no note of differences between long-run and short-run adjustments. This is vital, since it seems probable that one of the criteria of workable competition is that there shall not be too gross discrepancies between the action of short-run pressures and long-run tendencies.

III. *Long-Run Considerations*

At the risk of being convicted of an optimistic bias, I should like to point to certain ways in which long-run forces serve to mitigate the seriousness of the effects of imperfect competition. These considerations center largely in the proposition that long-run curves, both of cost and of demand, are much flatter than short-run curves, and much flatter than the curves which are commonly used in the diagrams of theorists. In fact, it may appear that much of the apparent seriousness of Professor Chamberlin's results derives from what I believe to be the exaggerated steepness of the curves he uses to illustrate them. This, of course, is a matter of degree only; but in the field of imperfect competition, and especially in the search for workable adjustments, these matters of degree are of the essence of the problem.

In the first place, the more attention centers on the imperfections of active competition, the more important become the forces of potential competition and substitution (both of which find a place in Chamberlin's system). Neither is a perfect check; but both together may come near it under favorable conditions.

As to potential competition, it is this, or the materializing of it, on which Chamberlin relies for the tendency to wipe out monopoly profits in the production of quality goods, and to bring individual demand curves and cost curves into tangency. But there seems to be a tendency to regard the business-man as having too little foresight to anticipate the materializing of potential competition, and as following an unduly grasping policy in re-

gard to price, and an unduly restrictive policy as to output, until potential competition becomes actual, and the industry is burdened with too many producers, whose individual output is restricted short of the optimum. This undoubtedly has some truth. It would be expecting a great deal of business-men that they should generally have perfect foresight of the emergence of potential competition, and on that account should avoid unduly restrictive policies. Nevertheless, there is apparently a tendency of somewhat similar effect on the part of some or many businesses, even if not guided by such impossibly perfect foresight. There is a tendency to strive to maintain and increase output, as if this were an end in itself, aside from the resulting net earnings and perhaps at a short-run sacrifice of net earnings which a more grasping policy might secure. In such cases, business, whether putting its reasoning in this form or not, acts as if it were governed by anticipations of potential competition, and by the desire to forestall its materializing.

As to substitution, it is a commonplace that the triumphs of modern industrial chemistry have vastly increased its range and flexibility; and it is increasingly spoken of as one form of competition. Indeed, it seems that the differences between substitute products, in cost of production and service value, are nowadays often no more serious than similar differences between different varieties of what we think of as the "same" product. This fact is so much in the business-man's consciousness that there is no need to emphasize it. Both potential competition and substitution have the effect of flattening the slopes of individual demand curves.

To develop the full importance of this it is necessary to take account of the time dimension of these curves. The abstraction of a timeless demand-schedule has tended toward the neglect of this factor. Yet in actual elasticities of demand a crucial element is the time required for a given change of price to bring about a given effect on volume of sales. In some instances the full effect may be felt in a matter of hours, while in others it may require a generation. In the latter case, of course, the effect of the price factor will be inextricably tangled with that of a complex of other changes.

One feature of this relationship might be expressed by a skewed surface or contour-map in which the vertical dimension measures price—or possibly price minus optimum selling expenses, if such a quantity could be given a usable definition.[3] The price should be that of one producer's grade of the product, those of others' grades being held constant. What we may call the west-east dimension would represent the length of time during which a given price-relationship remains in effect; and the north-south dimension would represent physical volume of sales of this producer's grade of the product. The intersection of the surface with any

[3] It would presumably vary with price, and also be complicated by the time-factor.

vertical north-south plane would be a demand-schedule representing the sales under various price-differentials, each being assumed to remain in effect a length of time represented by the distance of the plane from the west end of the diagram, where time equals zero. These curves would grow less steep from west to east. The horizontal contour-lines would be growth-curves (positive or negative) each representing the increasing effect, with time, of a given price-differential on volume of sales.

Such a surface would, however, represent only a beginning of analysis. Action by one producer would provoke responses by others which, if the original action had gone some distance, would act on a modified set of growth-curves. Changes in quality are, of course, not represented. Actual demand-curves may depend, not only on the price-factor represented, but also on the relation between the price-range of the various grades of this commodity and those of various substitutes; and on the profits made by this producer and by others in the industry, as an incentive to the materializing of potential competition. Even this affords an unduly simplified picture, and the whole functional relationship is probably so complex as to defy mathematical plotting.

The chief proposition remains—namely, that the long-run effects of a high-price policy on the part of any one producer would tend to a much larger falling-off in sales than would occur in the short run. The long-run schedule might in numerous cases approach the horizontal so closely that the slope would not be a matter of material moment, in the light of all the uncertainties involved. And this fact may be roughly represented by the attitude of some businesses, that it is "good business" to maintain and expand their sales volume, even at some sacrifice of immediate profits.

Long-run cost curves also tend toward the horizontal. There are two quite distinct types of cost-curve for a given productive unit in relation to volume of output. One has to do with changes in output within the physical capacity of an existing plant, and the other with changes in the amount of plant capacity without change in the percentage which is utilized. Long-run cost curves are apparently dominated by the second factor; and I shall take it for present purposes as representing the long-run function. Evidence of its character is difficult to secure, some of the best indications being derived from simultaneous comparisons of costs in considerable numbers of plants of different size, with the effect of percentage utilization eliminated where possible. Such evidence of this sort as I have analyzed points to the conclusion that it is likely to be only the very small plants which show materially higher costs causally traceable to their small size, while most plants are in a range of size which shows little or no downward or upward trend with increased size, while other factors account for much greater differences in cost between plant and plant than those due to size itself.

The indicated conclusion is that there is typically no definite "optimum size," but rather a wide optimum range of size, within which most plants fall; and that economies due to size are far from being such a vitally important factor as is suggested by the type of theoretical cost curve now in general use. A further conclusion is that imperfections in competition arising from the slopes of the long-run curves of cost or demand may, so far as these curves affect actual policy, be relatively unimportant. So far as immediate price policies are governed by long-run demand curves, or behave as if they were so governed, they are likely not to differ materially from those of perfect competition (this would have little application to the problem of unduly expanded selling costs). And even if the long-run scale of production is somewhat restricted, cost of production, as distinct from selling, is not likely to be thereby materially increased.

IV. *Short-Run Conditions*

The most serious problems of imperfect competition seem, as already noted, to center in the fact that the immediate short-run pressures are out of harmony with the conditions of long-run equilibrium. And the starting-point of a search for the conditions of workable competition seems to be the search for ways and means of reducing these discrepancies, under the conditions actually encountered. One approach to this question is by way of some of the paradoxes or conflicts in prevalent ideas as to the symptoms of a satisfactory competitive condition.

Perfect competition requires a market with such full knowledge that a standard commodity cannot sell at two prices at the same time at the same point of purchase and delivery. Actually, at least in large-scale industry, such a condition of "identical prices" is frequently taken as an indication of a monopolistic condition (Outline, II, A, 1, a.). And a state of less perfect market knowledge, permitting differences in price, is sometimes spoken of as causing active price competition to arise, where presumably there had been none previously (Outline, II, A, 1, b, (2)). This attitude implies a theory that one kind of imperfection requires another to take part of the curse off it. And there would be no paradox about it if the same persons did not at other points maintain the attitude that any departure from any of the conditions of pure or perfect competition is evidence of a monopolistic tendency.

The above implied theory suggests that the standard character of the product is not in itself favorable to workable competition between few and large producers, and that in such cases effective competition requires some uncertainty whether a reduction in price will be met or not. This in turn points toward a search for the least undesirable form of remedial "imperfection" (uncertainty).

Among the apparent inconsistencies of prevailing attitudes is the position that discrimination is a non-competitive symptom, coupled with the view that, when buyers invite sealed bids, unless they get a price lower than the general market affords, this result proves monopoly. In part, this seems to be a manifestation of the fairly general psychology of buyers, who do not object to discrimination so long as they get the benefit. So far as there is a real economic theory involved, it seems to imply the abandonment of the idea that competition and discrimination are mutually inconsistent. There is *prima facie* ground for the hypothesis that some forms and degrees of discrimination have a place in a scheme of workable, as distinct from perfect, competition. And as part of this problem, the theory of sealed-bid competition stands out as an unworked field for economists.

Perfect competition requires operation at full capacity, which is sometimes defined as the point of minimum cost, or as the point where marginal and average cost are equal. Actual competition has to make terms with the fact that, when demand fluctuates, industry must inevitably be operating short of full capacity much of the time. Workable competition must be workable under these conditions. Some of the requirements of such a result may be briefly indicated.

A price which at all times covers only short-run marginal cost would lead to large operating deficits whenever demand is short of capacity, and would bankrupt most industries, no matter how shock-proof their capital structures. And since the horizontal individual demand curve of pure competition leads to a price that covers only marginal cost, it is not one of the conditions of workable competition. Instead, the requirement is an individual demand curve with sufficient slope to bring price, on the average, far enough above marginal cost so that average cost may be covered, over the run of good times and bad. Along with this should go, presumably, enough price flexibility to afford a stimulus to demand in dull times, and the reverse in boom times. These are not easy requirements, but at least they mean that workable competition has some positive use for the sloping individual demand curve.

This will be disputed by some on the ground that competition can be trusted automatically to limit capacity at such a point that even under pure competition profits in good times will compensate for losses in bad times; and that this is the desirable adjustment.[4] A realistic view of this objection seems to involve the whole theory and practice of maintaining stand-by units (usually of inferior quality) to handle peak demands. Without going into this matter at length, it may be sufficient to indicate that, in the ordinary course of modernization and replacement, the stand-by units (the best units

[4] *Cf.* Outline, I, B, 1, a. In the discussion at the Round Table where a shorter form of this paper was read, this objection was raised by Professor George Stigler.

which are just not good enough to justify keeping them at continuous or nearly-continuous operation) are not likely to be sufficiently obsolete and inefficient to bring their marginal costs of operation up to a point that would yield large profits for the plant as a whole: large enough to offset operating deficits incurred most of the time, and to make the average represent an attractive return on investment. Hence the indicated result is extremely unlikely to follow.

Cost curves for varying output with a fixed plant probably fall into two main groups or types. In one, physical capacity has fairly rigid limits, and marginal cost appears to remain approximately uniform, nearly or quite up to the limit of physical capacity. This type may provisionally be taken as characteristic of continuous-process industries, dependent on heat or chemical action, which cannot be substantially speeded up beyond the ordinarily ecenomical rates. The other type would include processes which can be speeded up or worked overtime. Here it may be possible to produce considerable amounts beyond the point of lowest average cost, with marginal cost above average operating expenses, though possibly not far enough above so that a price equal to marginal cost would yield a fair return on the fixed investment.

The use of stand-by units might bring the first type a little nearer the second. But in the instances of steel and cement, this factor does not appear to modify the pattern of costs materially—possibly for the reasons already briefly indicated. In either case, it seems fair to conclude that the industry could not survive under prices which were always limited to marginal costs of the short-run variety, unless it deliberately destroyed its superseded units instead of leaving them to serve as stand-by capacity, and thus created an artificial bottle-neck on industrial expansion. And that may be dismissed as a possibility, for reasons hardly necessary to state. Under these circumstances, certain types of competitive situations may be distinguished and briefly analyzed.

First we may consider the standardized product, sold in a chaotic market in which discrimination is possible; any sale may be a subject for special bargaining, and special prices will permit the producer making them to gain a volume of business of material size, relative to his total sales, before these special prices are discovered and met by his competitors. This condition has been represented in the outline (II, A, 1, b) by a time-lag in the spread of market knowledge, which may be longer or shorter; but this is not the only controlling factor. A few hours during which the price-cutter can make fast one very large future order may be as good as a much longer period in an industry where there are no very large buyers or where firm long-term contracts cannot be secured. The size of the price-cutter relative to that of his rivals also has a bearing on the outcome. Variants are

possible; but the general conclusion of a tendency to drive prices below cost seems justified.[5]

The reason for this may be suggested by an abstract limiting case, which does not, however, accurately express the operation of actual cases. If a particular bit of business can be secured by a special reduced price, applicable to it exclusively, and will be lost if this special price is not made, and if this transaction is expected to have no effect at all on other business, then it is a source of increased net revenue at any price above marginal cost. Actually, such reductions would not have the general effect indicated above unless they did spread to other business; and if this is their usual result, rational business-men would naturally come to expect it. But the deterrent effect of this expectation may be partially counteracted in a number of ways. Most important, perhaps, is the likelihood that someone will hope to "get away with it this once," coupled with the suspicion that others will start the process, or have already done so, and that the first seller will not succeed in protecting the price structure by refraining, but will merely lose business. Then there are the sellers who are so hard-pressed for cash that they may disregard all but immediate effects on net income. The result is a nibbling process which can almost always go a little farther than it has gone. This may be mitigated by intermittent attempts to introduce more open and uniform prices.

At the other extreme comes the standardized product, with prices completely open and uniform for each purchasing locality (Outline II, A, 1, a). Here a reduction is sure to be met almost instantaneously, so long as price is above marginal cost; and the producer initiating it may, in the extreme case, hope to gain only his *pro rata* share of the general increase in sales of all producers resulting from the reduction in price. His sales would then be expected to increase in the same proportion as if he had a complete monopoly; and if this were the whole story, the incentive to reduce prices might be expected to stop at the same point as if a monopoly existed. However, the incentive to raise prices, if they get below this point, is a different matter, since an increase will not be automatically met; and thus the conclusion that this situation yields results identical with complete monopoly, is not warranted.

Among numerous modifying circumstances, there is still the possibility of securing a few large forward contracts, or at least some valuable goodwill, by taking the initiative in a general price reduction. In the second place, the market is governed by whichever among the several producers has the lowest price-policy. If one of them is keenly alive to the desirability of forestalling potential competition, he may fix a price close to the long-

[5] This might be modified by adopting schemes of cost-accounting with heavy allocations of capital-overhead to peak output. Such allocations represent a mixture of short-run and long-run considerations, and may fairly be disregarded here.

run normal, and the others will have to follow. There is much room in such a situation for the personal equations of different producers to modify the result. Or an increase of wages or prices of materials may, without changing the selling-price of the product, bring it nearer the competitive norm; and if for this or any of the other reasons mentioned, it gets below the monopoly level, there is no force tending to bring it back up, and it may remain there for a considerable period. The generally indicated result is, not so much a monopoly price as a decidedly sticky price, somewhere between the levels of pure competition and monopoly.

All this is on the assumption that the open prices are perfectly adhered to; and this is probably an extremely rare case. In fact it would not be very rash to assume that in most cases some degree of irregular pricing is chronic, and that there are hardly any in which occasional fits of it do not occur. The pure case may prove to be almost entirely limited to instances of open-price systems with waiting periods and otherwise implemented; and it is probable that even these should not be expected regularly to result in 100 per cent uniformity.

Thus it seems that the really important problem is not so much the case of pure "oligopoly," but the case in which the existence of openly-quoted prices exercises some degree of restraint on more or less chronic "chiselling" which is irregular, temporarily secret, and usually more or less discriminatory. Such a situation contains no guarantee of ideal prices; but it is something intermediate between pure oligopoly and the ruinously low prices likely to result from unlimited market chaos: more strongly competitive than the first, and more workable than the second. And something intermediate appears to be well-nigh a necessity. Incidentally, such limited "chiselling" seems likely in a general way to become more active in times of slack demand, and thus to tend to some degree in the direction of price flexibility.

Economic theory has not attacked the special problem of this form of pricing; and perhaps it cannot shed much light on it. But it appears to be one of the most important forms of imperfectly-competitive pricing, and might under favorable conditions prove to be fairly "workable." These conditions may be rather subtle and intangible matters; and the facts bearing on them are certainly not easy to secure. Nevertheless, it seems rather important to know more about them than we do.

As an approach to such analysis, a few tentative propositions may be considered. First, the actions of business-men in such a situation may be interpreted in the light of a complex of motives and considerations, among which the following might be mentioned. (1) The immediate effect on net earnings. (2) The effect with some account taken of the probable early reactions of others. (3) Long-run effects, chiefly reflected in effects on volume of sales. (4) Intangibles, including effects on good-will and on the

satisfaction or dissatisfaction of customers, bearing largely on the expediency of setting limits to discriminations and discrepancies between actual and openly-quoted prices. This may lead to a desire to make openly-quoted prices "fairly representative" of prices actually received, which may mean "equal to the prices actually paid by those customers who have no exceptional bargaining leverages," or may have somewhat different shades of meaning. There are obvious reasons for not wishing one's openly-quoted prices to give one the reputation of charging more than one is actually charging.

Reductions in openly-quoted prices may be classified according to the proportion of actual sales that the reduction is expected to affect. The intention and expected effect may be to reduce the whole scale of prices actually charged. Or the openly-quoted prices may apply to a considerable part of the business, and the intent may be to bring these prices down without reducing the lower ones, and thus reduce the spread. Or the reductions may occur at a time when the openly-quoted prices have come to apply to little or no business; and the intent may be simply to make them more "representative." Increases would presumably be intended to bring about an increase in the general scale, and would occur naturally at a time when demand was strong and competitive pressures toward irregular departures were therefore relatively weak. Or they might occur after a period of ruinous price-cutting had made producers ready to follow an upward lead—preferably one substantial enough to afford real relief, but not so large as to make the industry too invitingly prosperous. The preceding price-war would need to have driven home the bad effects of irregular pricing sufficiently to keep it temporarily in abeyance, or within narrow limits.

Special departures from openly-quoted prices are made for obvious reasons; and the large customer has an obvious advantage in securing such special prices. Such prices are not likely, however, to go close to the theoretical limit of marginal cost unless the whole price-scale has become demoralized to an extent that would bring it into the class of the chaotic market, already discussed. In typical large-scale industries, if the whole price-scale is such as to yield anything approaching a normal return on investment, special prices could not go close to short-run marginal cost without creating such discrepancies as a market of the sort we are now considering is not likely to tolerate. Special prices are, however, likely to be made without full recognition of their ultimate effects in dragging the whole price-structure downward, and to be lower than they would be if these ultimate effects were accurately forecast and fully taken into account.

Particular cases may be influenced by a number of specific pricing practices, including probably the looser forms of open-price arrangement, which, as already indicated, are not likely to bring about complete elimination of irregular pricing. Advance announcements of price changes may

facilitate increases by enabling the initiator to learn whether others are following suit, without losing too much business in the interval. The practice appears likely to have less effect on price reductions. Protection of customers against price declines subsequent to the giving of orders is a practice of some significance, largely neglected by students. It seems to have little applicability except in cases of quoted prices in industries with a limited number of sellers and a fairly well organized price-structure. Its effects would be different according as it was applied in an industry in which orders are given at a particular time of year for the coming season (for example, retail sale of oil for household heating) or an industry in which there are always some outstanding orders which would be affected by a price reduction. These are only a few instances of special practices which a more complete study would need to take into account.

A standard product is consistent with a sloping individual demand curve, chiefly in the case of few sellers and a supply-governed price (Outline II, A, 2). The slope of the curve is a function of the output of the producer in question, relative to the total output; and the resulting excess of price above marginal cost, while worth study, may not be a real "imperfection," from the standpoint of workable competition. Price flexibility with fluctuating demand would theoretically depend on the nature of the fluctuation as affecting elasticity near the existing price-range. But these problems need not detain us here.

Another special case is that of a standardized product, with sloping individual demand-curves which are definite and knowable—the case of spatially separated producers selling at uniform mill prices (Outline II, A, 3, a). As a first approach, we may assume the marginal costs of the various producers to be equal, and known. Here there would be a point, above marginal cost, below which price would not go. If the slopes of the individual demand curves were just the right ones, this point might be the long-run normal price, but it seems more likely that it would be below it. These slopes would depend on the spatial distribution of demand; and one difficulty is that, with large consuming centers, the curves would be discontinuous. Another difficulty is that, if prices were above this stopping-point, there would be no incentive to lower them, since a reduction would be sure to be met. If the marginal costs of the producers were different and uncertain, there might be a range instead of a point, within which active price competition might prevail. But there would still be a higher range within which there would be no reliable force tending to reduce prices. Thus the conditions of a tendency toward equilibrium would not be present. "Chiselling" would, by definition, be eliminated and the conditions leading to it (incentive plus opportunity to do it undetected) would be limited to the boundary-points between different producers' selling areas.

A variant permitting limited freight absorption would make the individ-

ual demand curves steeper and more indefinite and uncertain, leading to uncertainty whether a price reduction would be met. It might also leave substantial room for "chiselling." In both this and the preceding case, the outcome would vary with the geographical facts of each particular industry. Neither can safely be regarded as a universally workable, *a priori* formula.

Finally, we may turn to quality products, where there are sloping individual demand curves and considerable uncertainty whether, or to what extent, a given reduction of price will be met. Here it is worth while distinguishing degrees of quality differential. There is the extreme degree, in which the individual producer's product has a rather steep demand curve and will stand a very considerable price differential for a long time. This approximates the condition of monopoly. In some cases, where the customer is a poor judge of quality, this kind of situation can apparently be built up by sheer advertising.

But there is also the case of more moderate quality differentials, or those of which the consumer is better informed. Here the individual demand curve is flatter, especially if a moderate time is allowed for the consumer to find out what quality is being offered in return for any given price differential. It seems that some of the healthiest cases of workable competition in large-scale industry are of this type. Automobile production is generally regarded as a fairly workable example. And in the case of tires, price competition appears to be even stronger, though tires are a quality product, and therefore come under the head of "monopolistic competition."

As to directions in which to look for possible improvement in the future, it may be worth considering the possibility that technical progress may bring about still closer and more general substitution; and also that the increased use of specifications, and more widespread knowledge of them, may help to bring more of these substitutes, or price-insensitive quality differentials, within the range of moderate and price-sensitive differentials. This would increase the number of industries which, despite large-scale production, have the characteristics of fairly healthy and workable imperfect competition, rather than those of slightly-qualified monopoly. In such cases, one may hope that government need not assume the burden of doing something about every departure from the model of perfect competition.

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SCHUMPETER'S BUSINESS CYCLES[1]

The scope of this monumental treatise may be indicated by a brief review of its chapters, classified here, with some violence to the unity and interpenetration of approaches in the book itself, as introductory, theoretical, historical, and statistical. The introductory chapter discusses business situations as they are apprehended by the business-man; distinguishes groups of external factors that affect economic change; lists the statistical series that may be used advantageously in continuous observation of the business conjuncture; and ends with the expected conclusion that empirical linking of factors and symptoms, as reflected in time series and other data, is insufficient for the understanding of economic change, since observation of actual economic processes cannot distinguish between interwoven causes and effects. To make causal analyses a theoretical apparatus is indispensable.

This theoretical apparatus is presented in chapters 2 through 4. Chapter 2 deals with equilibrium and the theoretical norm, *i.e.*, with the stationary economy. Chapter 3 presents the entrepreneur, the innovation, and the banking system—the triple alliance that contributes a strategic impetus to economic evolution. Chapter 4 comprises the crux of Professor Schumpeter's theory of business cycles, indicating how the behavior of entrepreneurs provides the primary model for use in the study of business cycles; how this primary model is complicated by consideration of secondary factors (errors, propagation through the credit system, etc.), and of the various types of cycles to which the primary and secondary factors give rise. These three chapters are to a large extent a summary of Professor Schumpeter's earlier writings on the nature of a stationary economy and the theory of economic change. But in chapter 2 comments on imperfect competition take account of recent developments in the field; and in chapter 4 business-cycle theory is expanded and extended materially beyond the somewhat bare statement of it in Professor Schumpeter's earlier writings.

Chapter 5 in Volume I discusses the bearing of the theoretical model upon the measurement of cycles in time series. Chapters 8 through 13 in Volume II deal with the behavior of various economic quantities in Great Britain, the United States, and Germany, for the pre-war period as represented by annual data. The successive chapters discuss the general price level, physical quantities (total) and employment, prices and quantities of individual commodities, expenditures and wages, the rate of interest, the central credit market and the stock exchange. These chapters may be termed statistical, although this does not mean that they present a detailed statistical analysis of cycles in the various aspects of the economic system. In these chapters there is more of theoretical and qualitative dis-

[1] *Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capitalist Process*, by JOSEPH A. SCHUMPETER. Vols. I and II. (New York: McGraw-Hill. 1939. Pp. xvi, 448; ix, 647. $10.00.)

cussion than of quantitative analysis; and they may be classified as statistical only by comparison with the other parts of the treatise.

Chapters 6 and 7 in Volume I present historical outlines of economic change in the three countries mentioned, for the years from 1787 to 1913—outlines concerned with the dating of two of the three cycle types that are distinguished on the basis of historical evidence, and with the recording of the more outstanding innovations with which the cycles are associated. Chapters 14 and 15 in Volume II contain a detailed discussion of economic changes from 1919 to date. These four chapters may be characterized as historical, although the last two, which deal with recent years, may be alternatively viewed as an application of all three types of approach to the post-war decades. The recent years are discussed much more intensively and comprehensively than pre-war years, the last two chapters accounting for 300 of the 1,000 pages in the two volumes.

This outline of the scope of the treatise suggests that any thorough summary of its contents would exceed the limits of the present review. Such a summary would be exceedingly difficult because of the character of Professor Schumpeter's discussion. Some of the chapters, as already indicated, are themselves summaries of the author's earlier writings, and would need expansion rather than condensation. Other parts, especially those classified above as historical, are running commentaries upon specific situations, with a wealth of allusions, incisive sidelights, references to existing literature, and theoretical suggestions. Such discussion cannot be summarized effectively. In still other parts, the author's meaning is elusive in that the reader is uncertain what limits of confidence Professor Schumpeter assigns to his statements and what in detail is the basis upon which they are made—a comment of particular application to the discussion of the dating of cycles and the presence or absence of cycles in a given series.

One must therefore select for review only a few of the numerous problems treated in the two volumes. The presentation below deals with three topics that seem to the writer to be of wide bearing and to call for critical evaluation: (a) the relation between distribution of entrepreneurial ability and the cyclical character of economic change; (b) the four-phase scheme of the business cycle and its bearing upon statistical analysis; (c) the three types of cycles distinguished. I shall first attempt to present Professor Schumpeter's view on these three topics, and then formulate the questions which, in my view, are raised by his discussion.

To Professor Schumpeter, business cycles are pulsations of the rate of economic evolution. Economic change in general is attributed to three groups of forces: external factors, for example, the demand of governments for new military weapons; the factor of growth, by which the author

means the continuous gradual changes in population and in the volume of savings and accumulation, changes that do not require drastic shifts in the combination of productive factors and thus may be attained by the ordinary, run of the mill economic agent addicted to an habitual and adaptive type of activity; and innovations which represent material changes (or as Professor Schumpeter defines them, changes of first order) in the production functions. It is innovations that are of strategic importance in the evolution of capitalist economy, innovations that are usually introduced by new rather than by old firms, by new men rather than by those who already occupy prominent niches in the functioning system.

Business cycles[3] are recurrent fluctuations in the rate at which innovations are introduced into the economy, in the intensity with which entrepreneurs exercise their *sui generis* function of overcoming obstacles to new combinations. The reason for this discontinuity in the rate of innovations and in the intensity of entrepreneurial endeavor, of the bunching of innovations at one time and their comparative scarcity at others, lies in the distribution of entrepreneurial ability. This ability to dare, to initiate, to overcome obstacles to innovations is, like many other abilities, distributed along a curve which suggests that there are few individuals endowed with such ability to any great degree and many who are equipped only to initiate and follow the pioneering efforts of the few. If then we envisage, in a state of equilibrium, the action of the first entrepreneur, one of high ability, we shall see that his action will be followed by a swarm of imitations, increasing in volume as time passes and as the innovation becomes a more and more accepted pattern of action.

This uprush of innovation, accompanied by expanding credit, rising prices, rising interest rates, a relatively constant volume of total output but usually a shift in favor of producers' goods, constitutes the period of rise in the first approximation to the business cycle. It terminates as soon as the disturbance of the equilibrium has proceeded far enough to upset the existing relations of prices, costs and quantities, thus making it impossible to formulate rationally calculated plans for the future. This terminus is reached all the sooner because innovations are usually concentrated at any given time in one or few industrial areas, and the increase in risk and uncertainty is made more effective by the exhaustion of innovation opportunities. At the turn, the rate of innovation slackens and a period of readjustment ensues in which entrepreneurs take stock and the economy recedes to a new equilibrium level, a level which both growth and innovations make higher than that from which the expansion started. During this period of recession credit volumes, prices and interest rates decline but total output is likely to average larger than the preceding prosperity.

This first approximation, the primary model, thus accounts for a two-phase cycle, a departure upward from equilibrium level and a recession

to a new equilibrium level. But conditions under which entrepreneurial activity takes place in reality must next be considered: the errors of forecast; the speculative tendencies of individuals; the thousand and one peculiarities of economic institutions that are likely to prolong and exaggerate a movement once initiated. These surface factors, which, in Professor Schumpeter's view, often claim the attention of business-cycle students to the exclusion of the fundamental process of innovation, may and do intensify the rise during the prosperity phase beyond the level to which it would have been carried by the stream of innovations proper; and during recession they reënforce the deflation, carrying it often below the equilibrium level into depression. When this occurs, the economy returns to equilibrium whenever the forces of depression spend themselves, a point determined largely by the peculiarities of the secondary factors that produce the abnormal contraction. But the equilibrium reached by recovery is not necessarily identical with that which would have been attained had the depression not taken place.

The combination of the first and second approximations yields a four-phase cycle of prosperity, recession, depression, and revival. The upper turning point is determined essentially by the primary model, whereas the revival point is determined largely by secondary factors. But whatever the difference in the causation of prosperity and recession as over against depression and revival, the four-phase model of the cycle must constitute the paramount guide in the statistical study of time series. Cyclical units should be defined not from trough to trough or peak to peak but from the beginning of prosperity, the point where the series begins to rise above the normal level to the end of revival, the point where the series again reaches the new normal. Professor Schumpeter dates the terminal points of the cycles that he distinguishes in accordance with this rule, and advocates for time-series analysis a method, originally proposed by Ragnar Frisch, that calls for establishing points of inflection. Under certain conditions these points of inflection are in the neighborhood of equilibrium levels and their establishment will thus serve to ascertain the terminal dates of the cycles, if not the turning points that divide prosperity from recession and depression from revival. Since inflection points suggest equilibrium levels in cyclical movements only if the rate of cyclical rise or decline diminishes as the curve pulls away from the equilibrium line, Professor Schumpeter accepts this condition as consonant with the theoretical significance of normal levels.

Neither the primary, nor the secondary, model implies necessarily one type of cycle only, *i.e.*, a cycle of approximately the same duration and intensity. On the contrary, differences in the magnitude of various innovations suggest that there may be several kinds of cycles differing in duration and in amplitude as the innovations with which they are associated differ

in magnitude and the time they require to attain their proper place in the economy. Presumably the same is true of the secondary factors: they may and do differ with reference to the span of time during which they produce their exaggerating effect upon expansion and liquidation. It is thus theoretically plausible to expect cycles of varying duration and intensity, their types and their interrelations to be determined largely by observation.

Professor Schumpeter finds that in order to account for the cycles that can be observed historically and statistically during the last century and a half three types of cycles should be distinguished: long waves of about fifty years in duration (Kondratieffs); intermediate waves of about eight to nine years in duration (Juglars); and short waves of about forty months in duration (Kitchins). Unfortunately nowhere in the two volumes is there a combined chronology stating the terminal dates of the various types of cycles distinguished by Professor Schumpeter for the three countries with which he deals in his historical and statistical sections. But the historical outlines in Volume I are concerned with establishing the Kondratieffs and the Juglars in the three countries before the World War; and in the detailed discussion of the years since 1919 there are a few specific indications of the dates of some Kitchins.[2]

The concurrence of these three types of cycles, each christened by the name of the economist who was chiefly responsible for claiming validity for it, accounts, according to Professor Schumpeter, for the diversity in the duration and amplitude of cycles observed in time series; and it explains why some "depressions," such as those of 1825-30, 1873-78, and 1929-34, were so long and so deep—a result of coincidence in phase of at least two of the three types of cycles. But all three types of cycles are due to the same fundamental set of causes, described by the primary model; in all we should expect four or two phases as the secondary factors are or are not sufficiently

[2] I have attempted to construct a chronology of the Kondratieffs with the following results:

Prosperity	Recession	Depression	Revival
Industrial Revolution Kondratieff, 1787-1842: Cotton Textile, Iron, Steam Power			
1787-1800	1801-1813	1814-1827	1828-1842
Bourgeois Kondratieff, 1842-1897: Railroadization			
1843-1857	1858-1869	1870-1884-5	1886-1897
Neo-Mercantilist Kondratieff, 1897 to date: Electricity, Automobile			
1898-1911	1912-1924-5	1925-6-1939	

The dates of the first and second Kondratieff are established from the discussion for Great Britain; that of the third from the discussion for the United States. The specific dates for the three countries are presumably somewhat different, but the differences are likely to be minor. It should also be noted that Professor Schumpeter considers that the first Kondratieff is not very clearly shown in Germany. This table above was checked by Professor Schumpeter who has kindly suggested a few changes in its original version.

Professor Schumpeter also provides dates for Juglars. They are presented as roughly corresponding to the dates in Thorp's *Business Annals,* with due allowance for the difference in terminology.

effective to produce depressions and revivals. As to the relations among these three types of cycles, two observations are made by Professor Schumpeter. First, the theoretical model requires that "each Kondratieff should contain an integral number of Juglars and each Juglar an integral number of Kitchins" (p. 172). The immediate consequence of this is that the first years in the prosperity phase of each Kondratieff coincide with Juglar and Kitchin prosperities; and the same is true of the immediately preceding revivals. Second, "barring very few cases in which difficulties arise, it is possible to count off, historically as well as statistically, six Juglars to a Kondratieff and three Kitchins to a Juglar—not as an average but in every individual case" (p. 174). This empirical conclusion, however, is not called for by the theoretical scheme; indeed the latter would lead us to expect irregularity in the number of the shorter type cycles comprised within each cyclical unit of longer duration.

This summary, bare and oversimplified as it is, reveals the significance of Professor Schumpeter's theoretical scheme and empirical findings. The close connection in this scheme between business cycles and the general process of evolution of capitalist economy; the direct bearing of the theoretical model of the cycle, with its equilibrium levels and its four phases, upon the statistical analysis of time series; the specificity of the three-cycle scheme, in the duration, interrelation and concurrence of the three cycle-types—all contribute to an impression of a well integrated intellectual structure that elegantly spans the gap between controlled imagination and diversified reality.

But further reflection and even a partial scrutiny of the evidence presented in the two volumes raise a host of crucial questions and disturbing doubts. In selecting some of these for discussion, we may begin with the association claimed to exist between the distribution of entrepreneurial ability and discontinuity in the making of innovations—in other words, their "bunching." What precisely is the necessary connection between scarcity at any given time of high entrepreneurial ability (and the plenitude of imitators) and the bunching of innovations? Given an infinite supply of possible innovations (inventions and other new combinations), why need entrepreneurial genius defer the next pioneering step until his preceding one has been so imitated and expanded that the upsetting of the equilibrium stops even him in his tracks? If imitators are ready to follow as soon as the entrepreneurial genius has proved that the innovation is successful, the disturbance of equilibrium at that time is certainly not sufficient to bar this genius from turning to new feats and thus initiating an uprush in another industry. Why should we not conceive these applications of high entrepreneurial ability, whether represented by one man or several, as

flowing in a continuous stream, a stream magnified in a constant proportion by the efforts of the imitators?

A close reading of Professor Schumpeter's text, both in this book and in his earlier treatise on the *Theory of Economic Development,* indicates that he expects high entrepreneurial ability to pause after the innovation and descend to the lower level of its imitators. The theory definitely calls for discontinuity *over time* in the operation of entrepreneurial ability. But such discontinuity cannot be derived from a distribution of entrepreneurial ability *at any given moment of time,* except on one assumption—namely, that the ability called for is so scarce that it may be completely absent during some periods of time while present at others. But this implies cycles in the supply of entrepreneurial ability, whether the supply be conceived in terms of individuals or of phases in the life of various individuals. I am not sure that Professor Schumpeter would view this assumption as valid.

Further reading and reflection suggest two possible alternative explanations of the bunching of innovations. The first is that *by definition* an innovation so disturbs existing economic relations that its introduction on a significant scale (*i.e.,* by the first entrepreneur plus the imitators) will necessarily prevent any other innovation from being successful so long as a process of readjustment has not taken place. This answer means, of course, that an innovation, by definition, is tantamount to a two-phase cycle, *i.e.,* it is defined as the kind of change that produces, upon its introduction, a phase of prosperity and of recession. And correspondingly, an entrepreneur *sui generis* is one who by definition introduces innovations that by definition result in a two-phase cycle. Hence by definition there is a necessary association between two-phase cycles and the *existence* of entrepreneurs. This, however, is such an obvious tautology as to be inacceptable as a significant interpretation or extension of Professor Schumpeter's position.

The second answer, suggested by Professor Schumpeter's references to the concentration of innovations in restricted industrial areas and by the emphasis in his historical discussion of technological changes, is that the discontinuity or bunching in the rate of innovation rests essentially upon discontinuity or bunching in the supply of possible new combinations, particularly of technological inventions. This, in essence, assumes cyclical fluctuations in the rate at which producers of the technical basis for innovations contribute to the stock of possible new combinations from which entrepreneurs can choose. Thus, it may be said that in the last quarter of the eighteenth century in England there were several major inventions (cotton textiles, iron and steel, steam engine); that thereafter it was not until the 30's of the nineteenth century that another big group of inventions, connected with steam railroads, became accessible to the entrepreneur; and that as a result we have a two-phase cycle of prosperity in the last

quarter of the eighteenth century and of recession in the next quarter.

Whether or not this be a proper extension of Professor Schumpeter's theory, the argument that technological and other opportunities for economic innovation are not necessarily continuous over time has some plausibility. There may be periods of hiatus with no big potential change on hand to stimulate and motivate the driving power of entrepreneurial genius. But this generalization, viewed as a basis for a primary model of business cycles, is subject to severe qualifications. Discontinuity of opportunity can be assumed only with reference to the most momentous innovations such as steam power, electricity, etc., *i.e.*, innovations that bear upon Kondratieff cycles. We can hardly expect significant fluctuations in the stock of innovation opportunities of the type that are associated with the Juglar or the Kitchin cycles. Furthermore, even with reference to the major innovations that may be associated with fifty-year spans, there is some indication that the long lapse between the appearance of the inventions is itself partly conditioned by the functioning of the economic system. For example, we may say that electricity did not become available sooner because it had to wait until the potentialities of steam power were exhausted by the economic system and until the attention of inventors and engineers was ready to be diverted to the problems of electricity. If this is so, there may be discontinuity in the *appearance* of inventions, but there is no necessary time lag between those major inventions as sources of significant economic innovations. Thus, even for application to a primary model of the Kondratieff cycle the assumption of discontinuity of technical opportunities would have to be closely scrutinized in the light of historical evidence.

The queries raised above should not be interpreted as denying the importance of entrepreneurial genius or the jerky character of economic evolution. They stem from a critical consideration of one point only, the association between distribution of entrepreneurial ability and cyclical fluctuations in the rate of innovation, an association that appears crucial in Professor Schumpeter's business-cycle theory. Nor need it be emphasized that the discussion above applies exclusively to the first approximation, the primary model, and neglects completely the secondary factors. It is the former that Professor Schumpeter stresses as providing the fundamental explanation of business cycles, and it is the former that contains his specific contribution. The term "secondary factors" subsumes the variety of forces treated in many other business-cycle theories, and there is a tendency in Professor Schumpeter's treatise to slight them, considering them at best as influences inferior to the factors cited in the first approximation.

We may pass now to a consideration of the four-phase model of a cycle conceived in terms of departures from an equilibrium line, and the bearing of this model upon statistical analysis of time series. The procedure

preferred by Professor Schumpeter involves establishing points of inflection, first in the original series, then in the line that passes through the first series of inflection points and so on, successively decomposing the total series into several cyclical lines. Professor Schumpeter himself recognizes the difficulties involved in the application of this procedure (see page 211, vol. I). There is first the delicate problem of smoothing the series so as to eliminate the effect of erratic fluctuations on the second order differences used to establish inflection points. A more serious difficulty arises because the assumption that the inflection points are in the neighborhood of equilibrium levels implies a specific pattern of cyclical movements; and there is no ground for expecting cyclical fluctuations in actual series to conform to this pattern.

For these reasons Professor Schumpeter does not recommend the method for general application and recognizes it only as a first approximation and a far from infallible guide. He presents applications of this method in his book to just two series: one used for purely illustrative purposes in chapter 5, a monthly series on revenue freight loadings from 1918-1930 (Chart III, page 218) and the other used for analytical purposes in chapter 8 (Chart IX, page 469), an annual series of wholesale prices in the United States from 1790 to 1930. For the rest, statistical analysis is confined to a graphic portrayal of the series, sometimes reduced to successive rates of percentage change, sometimes smoothed by a simple moving average, and in one case with a fitted trend curve and fitted cycles. The preponderant number of series are, however, left in their original form and the statistical analysis for almost all of them is in the form of qualitative statements of quantitative import, based upon observation of the charts.

The difficulties encountered in the matter of inflection points and the paucity of formal statistical analysis in the treatise lead to a doubt whether Professor Schumpeter's concept of equilibrium and of the four-phase model of business cycles are such as to permit of application to statistical analysis. This doubt is strengthened when it is considered that the concept calls for segregating movements of the equilibrium line caused by external factors and growth from movements caused by innovations. Hence the usual lines of secular trend, drawn so as to bisect the area of cyclical fluctuations, are not acceptable from the viewpoint of Professor Schumpeter's theoretical model. This model requires, as I see it, that the line underlying any given cycle should express at any given time only the level that can be maintained by the activity of the inert adaptive character not properly dignified by the term entrepreneurial. To segregate this level from the slant given to the line by the cumulation of innovations is indeed difficult.

By refusing to deal with secular trend lines based upon formal characteristics (irreversibility, smoothness, etc.) Professor Schumpeter sacrifices the possibility of basing the distinction between long-term movements and

cyclical variations upon observable criteria. By refusing to accept peaks and troughs as guides in the determination of cycles he scorns the help provided by that statistical characteristic of cycles in time series. One cannot well escape the impression that Professor Schumpeter's theoretical model in its present state cannot be linked directly and clearly with statistically observed realities; that the extreme paucity of statistical analysis in the treatise is an inevitable result of the type of theoretical model adopted; and that the great reliance upon historical outlines and qualitative discussion is a consequence of the difficulty of devising statistical procedures that would correspond to the theoretical model.

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The validity of the three-cycle schema, the last topic under discussion, hinges largely on the nature of the historical evidence and qualitative analysis. As already indicated, Professor Schumpeter does not claim for the Kondratieff-Juglar-Kitchin combination any necessary connection with his theoretical model. But he does present it as a schema called for by historical reality, as a classification fully justified by the way it describes successive business cycles since the last quarter of the eighteenth century in the three countries under observation. Yet, in spite of numerous references to this classification in the historical outlines, in spite of the determinate way in which its validity is claimed in the treatise, there remain serious doubts that such validity has been demonstrated or could be demonstrated with the type of materials and analysis employed by Professor Schumpeter.

The cycle is essentially a quantitative concept. All its characteristics such as duration, amplitude, phases, etc., can be conceived only as measurable aspects, and can be properly measured only with the help of quantitative data. Furthermore, the distinction between cycles and irregular movements traceable to external factors can be made at all adequately only if the successive cycles are measured and averages are struck in which the influence of external factors can be reduced, if not eliminated. This does not mean that observation of cycles on the basis of qualitative information is neither possible nor valuable. For whatever quantities reflect cyclical changes, these changes result from discrete acts by individuals or nonpersonal units in the social system. Some of these discrete acts may be recorded singly and separately in historical records; of others a crude count or impression can be derived from contemporary qualitative reports. The study of such qualitative data in conjunction with statistics is indispensable for a close analysis of the latter. And the former without the assistance of the latter can often give a crude idea of the succession of cyclical phases and of very striking differences in amplitude between one cycle and another. But it is difficult to see how qualitative records can yield much beyond a suggestion of dates of peaks and troughs of a single type of cycle; how

one could, on the basis of historical records alone, distinguish the dating and phases of several concurrently existing cycle types.

The question raised bears most upon the establishment of the Kondratieff cycles. To establish the existence of cycles of a given type requires first a demonstration that fluctuations of that approximate duration recur, with fair simultaneity, in the movements of various significant aspects of economic life (production and employment in various industries, prices of various groups of goods, interest rates, volumes of trade, flow of credit, etc.); and second, an indication of what external factors or peculiarities of the economic system proper account for such recurrent fluctuations. Unless the former basis is laid, the cycle type distinguished cannot be accepted as affecting economic life at large—it may be specific to a limited part of the country's economic system. Unless the second, theoretical, basis is established there is no link that connects findings relating to empirical observations of a given type of cycles in a given country over a given period of time with the broader realm of already established knowledge.

Neither of these bases has ever been satisfactorily laid for the Kondratieff cycles. Kondratieff's own statistical analysis refers largely to price indexes, interest rates, or volumes of activity in current prices—series necessarily dominated by the price peaks of the Napoleonic wars, of the 1870's (not unconnected with the Civil War in this country), and of the World War. The prevalence of such fifty-year cycles in volumes of production, either total or for important branches of activity, in employment, in physical volume of trade, has not been demonstrated; nor has the presumed existence of these cycles been reconciled with those of a duration from 18 to 25 years established for a number of production series in this and other countries. Nor has a satisfactory theory been advanced as to why these 50-year swings should recur: the explanations tend to emphasize external factors (inventions, wars, etc.) without demonstrating their cyclical character in their tendency to recur as a result of an underlying mechanism or as effects of another group of external factors of proven "cyclicity."

These doubts as to the validity of the Kondratieff cycles are not dispelled by the evidence Professor Schumpeter submits. The part of his discussion that deals with qualitative, historical evidence leaves unanswered two crucial questions. The first refers to the particular aspect of activity that is considered as revealing the Kondratieff cycles and is thus observed to establish the dates. Such observation obviously cannot relate to economic activity at large, for qualitative data on the course of general economic activity necessarily deal with short-term changes and would not serve to differentiate the underlying Kondratieffs from the much more clearly marked shorter cyclical swings. One must, therefore, in order to set the dates of Kondratieffs, choose some activity particularly sensitive to these long swings.

The natural choice would be the economic innovations whose introduction forms the substance of Kondratieff prosperities. But as Professor Schumpeter observes, such innovations usually make their appearance before the Kondratieff that is associated with them. Thus steam railroads began to be constructed before the railroadization Kondratieff (*i.e.*, before 1843); and electricity was well known before the Kondratieff associated with it began in 1898. One then tends to infer that a Kondratieff begins when the underlying major innovation is being introduced on a large scale and at a rapid rate. But does this mean that the prosperity of a Kondratieff is the period at which the introduction of the innovation displays the maximum absolute or percentage rate of increase?[8] One searches in vain for a definite formulation of the criterion by which historical evidence is analyzed to distinguish the Kondratieff cycles from the Juglars and used to establish for the former the terminal dates and also those of the four phases.

The second question raised by the discussion of the Kondratieffs in the light of historical evidence refers to the treatment of "accidental" external factors and of transient secondary influences. As Professor Schumpeter himself recognizes, any given cyclical turn, in any observable type of cycle, can be attributed to one or several specific historical events, *i.e.*, to some transient accidental circumstances in the neighborhood of the turn. And yet it should be possible in the analysis to distinguish between these accidental concomitants and the underlying cyclical swings. As already indicated, this segregation is accomplished in statistical analysis by averaging or similar devices. In the treatment of qualitative, historical evidence the task is more difficult. It might be facilitated by a classification of various types of factors that would distinguish in advance cyclical factors from others; but even then the concurrence in historical reality of accidental and cyclical factors might necessitate what is essentially a quantitative analysis. It is not clear how Professor Schumpeter deals with the problem. In some cases he recognizes an "accidental" disturbance that produces what appears to be a cyclical turn, but does not disregard this turn as conforming with his schema. In other cases he attributes the departure of reality from the hypothesis to accidental historical conditions (notably in explaining why prices continued to decline in the United States after 1842 when there was supposedly a Kondratieff prosperity). The opportunity in such treatment for personal judgment is perhaps inevitable in the use of qualitative data; but the unfortunate consequences for the effort to establish the validity of the Kondratieff cycles and their dates are not diminished thereby.

As to the statistical basis for the recognition of Kondratieff cycles, Professor Schumpeter's approach, for reasons already indicated, can yield little

[8] This criterion would not fit experience in the United States, since the percentage rate of growth in the additions to railroad mileage was at its maximum before 1842; and the absolute rate of addition was at its maximum long after 1860.

of value. The failure to follow articulate methods of time series analysis reduces the statistical methods to a mere recording of impressions of charts, impressions with which it is often difficult to agree. To quote but two instances. (1) In Charts XII and XIII (pp. 486 and 487) Professor Schumpeter presents data on pig iron consumption (annual) for the United States, the United Kingdom and Germany for the period roughly from 1857 to 1913; and comments that the lines reflect "all three cycles . . . very well" (p. 485). But I, for one, cannot detect any traces of Kondratieffs in the lines either for Germany or for the United Kingdom; and would record two long cycles in the American series, one from 1857 to 1875 and the other from 1875 to 1895, rather than a single Kondratieff swing. (2) Chart XLII presents a monthly index of industrial production for the United States from 1897 to 1935. Professor Schumpeter then comments that the movement during 1898-1912 shows a rate of increase lower than that from 1922 to 1929; and this is cited to support the existence of a Kondratieff prosperity (1898-1912), as contrasted with a subsequent Kondratieff recession that is assumed to terminate in 1925.[4] But a glance at the chart suggests to me that the line from 1898 to 1912 is appreciably steeper than the line that would characterize the post-war decade; and that any higher rate that might be shown by a line drawn from 1922 to 1929 would be due exclusively to the position of the terminal years in the shorter-term cycles. Whichever of these judgments of the charts is correct, the ease of disagreement, of which there are many other instances, is an eloquent testimony to the insufficiency of the crude statistical procedures followed in the treatise to provide a basis for establishing cycle types of so elusive a character as the Kondratieffs.

The Kitchins are too short and perhaps too mild to be discernible with the available qualitative historical evidence, especially for the years before 1919. Hence the distinction between the Juglars and the Kitchins is based in the treatise largely upon statistical evidence, *i.e.*, again largely upon the impression conveyed by the charts. The series used for the pre-war years are almost exclusively annual, and the comments refer to the existence of the Kitchins rather than to their dates. Only for the years since 1919 do the plenitude of quantitative and detailed data and the emphasis that Professor Schumpeter places upon a thorough discussion of changes during these recent two decades, lead him to date the Kitchins and use them together with the Kondratieffs and Juglars to explain the successive economic conjunctures in the three countries under his observation.

The evidence brought together in the two volumes, and still more other available measures of cyclical behavior, suggest with some plausibility the

[4] To be sure, Professor Schumpeter deprecates the significance of this chart as evidence of Kondratieff phases; but the statistical evidence that he submits for Kondratieffs consists essentially of similar items, each of them qualified.

desirability of distinguishing more than one type of cycle, or recognizing in addition to the shortest unit of cyclical swing observable in the economic system others appreciably longer. But whether the distinction should be drawn in the specific form suggested by Professor Schumpeter is still an unanswered question. Annual series provide too crude a guide for establishing cycles as short as the Kitchins. A mere observation of "notches" on the surface of Juglars, or even of prominent short-term oscillations would not suffice: either result could be produced by random variations, and these short-term variations would have to be analyzed to demonstrate that they could not be due to mere chance. Hence only monthly series could be used as statistical evidence of Kitchins. But the series presented in the treatise cover too short a period to provide sufficient basis for the generalization that Kitchins existed in the past.[5] And no direct evidence seems to be presented to confirm the generalization so explicitly made that it is possible to count three Kitchins for every Juglar.

The critical evaluation above of what appear to be important elements in Professor Schumpeter's conclusions, viewed as a systematic and tested exposition of business cycles, yields disturbingly destructive results. The association between the distribution of entrepreneurial ability and the cyclical character of economic activity needs further proof. The theoretical model of the four-phase cycle about the equilibrium level does not yield a serviceable statistical approach. The three-cycle schema and the rather rigid relationship claimed to have been established among the three groups of cycles cannot be considered, on the basis of the evidence submitted, even tolerably valid; nor could such validity be established without a serviceable statistical procedure. The core of the difficulty seems to lie in the failure to forge the necessary links between the primary factors and concepts (entrepreneur, innovation, equilibrium line) and the observable cyclical fluctuations in economic activity.

And yet this evaluation does injustice to the treatise, for it stresses the weaknesses of the discussion and overlooks almost completely its strength. Granted that the book does not present a fully articulated and tested business-cycle theory; that it does not actually demonstrate the intimate connection between economic evolution and business cycles; that no proper link is established between the theoretical model and statistical procedure; that historical evidence is not used in a fashion that limits the area of personal judgment; or that the validity of three types of cycles is not estab-

[5] It is also to be noted that for recent years economic conditions in this country dominated those of Europe to an extent much greater than before the war. It is also in this country that the cycle in general business conditions was observed to be shorter than in England or Germany. Hence an analysis, confined to only the recent decades, would run the danger of ignoring the possible absence of Kitchins in England and Germany during the nineteenth century.

lished. Yet it is a cardinal merit of the treatise that it raises all these questions; that it emphasizes the importance of relating the study of business cycles to a study of the underlying long-term movements; that it calls for emphasis on the factors that determine the rate and tempo of entrepreneurial activity; that it demands a statistical procedure based upon a clearly formulated concept of the business cycle; and that it valiantly attempts to use historical evidence. In all these respects the volumes offer favorable contrast with many a book published in recent years on business cycles, whether of the type in which abstract reasoning is unsullied by contact with observable reality or of the opposite category in which mechanical dissection of statistical series is the sum total of the author's achievement.

Furthermore, both the summary and the critical discussion above necessarily fail to show the achievements of the treatise in providing illuminating interpretations of historical developments; incisive comments on the analysis of cyclical fluctuations in various aspects of economic activity; revealing references to an extraordinarily wide variety of publications in directly and indirectly related fields; thought-provoking judgments concerning the general course of capitalist evolution. It is difficult to convey the flavor of the book except by saying that in many of its parts it reads like an intellectual diary, a record of Professor Schumpeter's journey through the realm of business cycles and capitalist evolution, a journal of his encounters there with numerous hypotheses, diverse historical facts, and statistical experiments. And Professor Schumpeter is a widely experienced traveller, whose comments reveal insight combined with a sense of reality; of wide background against which to judge the intellectual constructs of men and the vagaries of a changing social order.

Thus, whatever the shortcomings of the book as an exposition of a systematic and tested theory of business cycles, these shortcomings are relative to a lofty conception of the requirements such theory should meet. It is the cognizance of these requirements that makes the book valuable even to one who may not be interested in the author's comments on the various and sundry historical, statistical and theoretical matters. But these comments are of high suggestive value and should, if given circulation, prove effective stimuli for further theoretical, historical and statistical study of business cycles and economic evolution. It is my sincere hope that Professor Schumpeter's labor embodied in the treatise will be repaid by an extensive utilization of it by students in the field, aware though they may be of the tentative character of his conclusions and of the personal element in some of his comments and evaluations.

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INTEREST RATES FOR HOME FINANCING

Prior to the present decade, the deficiencies of the financial system gave rise to uneconomical lending terms and to excessive rates of interest on home loans. The pronounced and continued upward sweep of the secular trend during the twenties deferred the inevitable consequences, but the ensuing crisis brought the shortcomings into sharp focus. The repercussions were national in scope and set into action various measures of reform to give relief to home owners. This paper presents a summary of the activities of the Federal Home Loan Bank System, the Home Owners' Loan Corporation, the Federal Savings and Loan System, and the Federal Housing Administration. The influence of these agencies on interest rates is discussed, followed by an analysis of the justification of the existing rate level. It is shown that present rates are no longer the result of free market activity but are governed primarily by the rate established on FHA insured loans. There is now some question of the adequacy of rates to cover the attending costs of home-financing institutions.

One of the most striking phenomena of the trade depression of the past decade is the trend of interest rates. It is difficult for many to accept the realities of the existing level, and hence it is often characterized as "artificial," "temporary," "unsound," etc. For the most part, this attitude is the result of an emphasis upon historical perspective rather than concentration upon the unusual conditions which have prevailed in recent years. It is commonly assumed that, with the correction of the existing abnormalities, interest rates will inevitably be adjusted. However, the uncertainties of the assumption cast doubt upon any early realization of the deduction made. Not only is this true because of the unknown duration of these so-called abnormalities, but, in addition, various controls which have been developed will likely continue to function over a much longer period.

The prevailing level of interest rates may also be questioned when related to the underlying forces of the demand for, and the supply of, capital. Many influences affecting these primary determinants of the cost of money encourage the conclusion that the present low level of interest rates is not justified in the light of economic conditions. Risks which are so comprehensive as to cause concern for the safety of the entire economy would seem to point in the direction of a rate sufficiently high to afford compensating protection for those who supply the capital. In the face of these abnormal risks, the rates of interest seem to be entirely inadequate.

As to the demand for capital, it is much more difficult to evaluate its vitality and persistency. There is much evidence of its potentiality where there is reasonable availability of funds at what is considered to be an attractive rate, accompanied by favorable terms of loan repayment. Evidence of possible demand is found in the development of various governmental lending agencies such as the Home Owners' Loan Corporation, the Reconstruction Finance Corporation, various agricultural lending groups, not to mention the indirect facilities provided by the Federal Housing Administration. Private lending institutions fail to display any great enthusiasm for accommodation of the borrowers financed through these

channels of government aid. It is assumed that the risks are abnormal.

Viewing the panorama of higher risks and prospective demand, it would be easy to reach the conclusion that current rates of interest do not reflect underlying conditions. But the reasons why such *a priori* anticipation does not develop into market reality are well known. In essence, they simmer down to deliberate and formulated governmental policy which establishes low rates of interest as a fundamental tenet of reform and recovery. To this end, cheap money and credit have been facilitated by various acts and policies. The means which have been used to convert this policy into operating practice run the gamut from grants for individual relief to central banking policy and direct lending.

Because of the influence of government, many are inclined to regard the existing rate structure as artificial and prescribed rather than natural or the result of orderly process. As a consequence, numerous observers declare that a rise in interest rates is inevitable. But it is likely that this view stresses unduly the familiar process of action and reaction and discounts the weight and persistency of the various forms of authoritarian intervention. Clearly, the more deep-rooted the latter becomes, the more controlling will be its influence, irrespective of its ultimate dependency upon desired elements of structural support. To be specific, the broad expanse of governmental authority is now sufficient to support for a long time the existing rate pattern either by subsidy or other form of diversion from the rest of the economy.

We may now turn from this general statement of applicability covering all interest rates to the more restricted discussion of rates in the field of home financing. This is a segment of the economy which has been given all too little recognition. Too seldom have we realized that the largest single block of private indebtedness is represented by mortgages on urban residential properties. Moreover, the fact that the cost of shelter absorbs from 20 to 25 per cent of consumer income must mean that expenditures for housing exert profound influences on economic conditions. Probably the scattered or atomistic character of home financing has precluded an appreciation of the larger part which it is bound to play as a whole.

Prior to the present decade, the facilities which had been developed to service home financing were undoubtedly inadequate in many respects. However, the pronounced and continued upward sweep of the secular trend concealed many of the shortcomings. Chronological perspective now enables us to recognize that rates of interest charged in earlier years appear high in relation to the purported security of the underlying asset, the usually accepted social desirability of home ownership, and the obvious necessity of shelter in one form or another. Among the reasons accounting for the comparatively high rates which were imposed upon residential financing are the following:

(1) *Dependence upon Local Sources of Capital.* While accurate statistics are not available to show the relative importance of the various financing media, reliable estimates indicate without question that the great bulk of the business was done by private individuals and building and loan associations. Necessarily, both obtained most of their funds from local sources. The absence of a financial mechanism which could tap the national money market curtailed the supply of funds and was in large measure responsible for the existence of unusually high rates.

(2) *Lending Plans.* While it is difficult to isolate the precise effect of financial mores upon prices and other economic factors, nevertheless, it is clear that the arbitrariness of lending plans did contribute to the unwarranted rates of interest. There was a general absence of a variable rate of interest, the practice being to charge a uniform rate to all borrowers. Similarly, custom usually restricted primary financing to an amount not in excess of 60 per cent of the appraised value. In most instances, this compelled the borrower to resort to some form of secondary financing where rates were unusually high.

(3) *Competition with Business Enterprise.* The attraction of capital for home-financing purposes also felt the test of competition from business enterprise. Business was expanding at such a rate as to give it a sort of prior lien on available funds. Investment in business was also preferred by investors and investment organizations because it entailed less servicing. As a result, it may be said that only a modicum of capital from the central money market became available for the financing of the nation's homes.

Aside from any program of government, it is clear that private enterprise on its own initiative and through its own means should be able to provide for more efficient financing of shelter. The type of coöperative action which would be required, however, is usually cumbersome and time-consuming when promoted by private sources. Such potential delay, combined with pressures arising from the chaotic condition of the mortgage market, caused the government to lend prompt assistance. Furthermore, it may be said that equally pressing was the request of private groups for various forms of governmental relief. In the background, there stood the demonstrated and satisfactory experience of financing agriculture under governmental auspices. On the whole, the Federal Land Banks, created in 1916, and the Federal Intermediate Credit Banks, organized in 1923, had succeeded in making a record which met the usual tests of business soundness. In a similar vein, it seemed desirable to coördinate the financing of urban homes. However, the pressure of the depression gave rise to a less coherent program than that formulated for agriculture. This is shown in the variety of facilities established to improve the home-financing process—namely, the Federal Home Loan Bank System, the Home Owners' Loan

Corporation, the Federal Savings and Loan System, and the Federal Housing Administration. All four groups were intended to be self-supporting. In addition, there are agencies, such as the United States Housing Authority and the present Farm Security Administration, which require subsidy. We may omit them from this discussion, thereby confining our study to those agencies which affect more directly private financing and which are relatively self-sustaining. Our analysis of each necessarily will be brief because we are concerned mainly with their effect upon the rate of interest rather than with an understanding of their detailed operations.

Federal Home Loan Bank System. The Federal Home Loan Bank System consists of twelve regional banks operating under the direction of a central Board of five appointees designated by the President and confirmed by the Senate. It was organized in 1932 primarily to provide reserve credit facilities for the accommodation of institutions engaged in thrift and home financing. This is accomplished through advances made by the regional banks to member institutions, at rates ranging currently from 1½ per cent for short-term loans to 3 per cent for long-term accommodation. Secured advances by the Federal Home Loan Banks are limited to an amount not in excess of 65 per cent of the unpaid balance, or 60 per cent of the value of the real estate securing the loan, and, where the loan has a maturity of less than six years, the limits become 50 per cent and 40 per cent, respectively. Mortgages may not be accepted as collateral if they exceed $20,000, if their maturity is longer than twenty years, or if they are more than six months past due, unless the debt is under 50 per cent of the value of the supporting real estate. By amendment to the original Act, the Banks are permitted to lend up to 90 per cent of the unpaid balance on loans insured under Title II of the National Housing act. Advances may also be made on direct or guaranteed obligations of the United States up to an amount not greater than their face value. Unsecured loans of one year may be made under certain conditions.

Funds to conduct the operations of the Banks have been obtained from the sale of capital stock to the government and member institutions ($165,718,950 now outstanding), deposits by member institutions (currently amounting to $29,616,685), and the sale of debentures in the open market. To date, debentures have been sold in the amount of $142,700,000, of which $48,500,000 are now outstanding. Debenture financing constitutes a connecting link between the larger money market and localities in need of funds for home-financing purposes. In addition, the flow of excess funds from one section of the country to another is accelerated through inter-bank deposits among the regional banks.

Structurally, the creation of such reserve banking facilities should permit accretions to the capital supply of local areas and contribute to lower rates of interest for residential lending. Moreover, it is intended that

changes in the rates of interest will be effected through the normal functioning of market activity. The Bank Board has no express authority to fix the rates charged by member institutions although it has resorted to moral suasion to bring about more economical financing. Section 5 of the Act sets a ceiling upon rates to be charged by member institutions at the lawful rate established by the individual states, or a maximum of 8 per cent where no legal rate is prescribed.

Reliable statistics are lacking to measure the precise influence of the Bank System upon the rate structure, but there is sufficient evidence to support the contention that a substantial downward revision has been effected. Much of the change has undoubtedly been prompted by the keen competition which has developed for residential loans but the Bank System has helped home-financing institutions to make the transition. As a result, a rate of 5 to 6 per cent to the home owner is not uncommon at present.

Home Owners' Loan Corporation. The Home Owners' Loan Corporation is also under the supervision of the Federal Home Loan Bank Board and was created in 1933 to provide more direct assistance than was possible under the Bank System. It was limited to the refinancing of distressed borrowers who were "unable to amortize their debt elsewhere." Accommodation of more than one million home owners in an amount of approximately three billion dollars had an immediate and pronounced effect upon home financing. Section 4 (d) of the Home Owners' Loan act vested authority in the Board to charge a rate not exceeding 5 per cent. With the exception of a few loans made on a cash basis at 6 per cent, the 5 per cent rate was in effect until October, 1939, when it was reduced to 4½ per cent.

It is impractical to appraise the ultimate economic soundness of the rates charged by this Corporation, because of the difficulty of forecasting possible losses. Any criterion of the adequacy of the rates charged should make allowance for the special character of the loans and other important conditioning factors. Loans were restricted to borrowers in distress, which necessarily means that the Corporation's portfolio consisted mainly of high-risk commitments. Also, as an agency created "to provide emergency relief," the HOLC was compelled to exercise a forbearance and leniency not typical of private lenders. In the light of these modifying influences, it is prudent to restrict observations of the Corporation's rate structure.

Federal Savings and Loan Associations. The home-financing industry of earlier years had suffered also because of a lack of homogeneity. Although engaged in the performance of a common function, the main participating institutions were known variously as building and loan associations, savings and loan associations, coöperative banks, and homestead associations. While federal savings and loan associations were authorized under the Home Owners' Loan act "to provide local mutual thrift institutions in which people may invest their funds and in order to provide for

the financing of homes," their creation incidentally served to standardize the name "savings and loan" and to establish a common form of organization and operation throughout the entire country.

The Act makes no reference to rates of interest which may be charged by federal associations, but there is reason to believe that their increased recognition and prestige should contribute to more economical financing. By enabling the industry to become better known, as well as by providing for desirable standardization of home-financing practices, it is reasonable to expect that institutions of the savings and loan type will be able to attract funds from the public at a lower rate—in turn passing the benefits along to the home owner.

Federal Housing Administration. Another act of legislation intended to relieve pressures overhanging the existing home debt, and especially to promote new residential construction, is the National Housing act passed in 1934. Specifically, the Act recites that it was "to encourage improvement in housing standards and conditions, to provide a system of mutual mortgage insurance, and for other purposes." The chief innovation is the provision of insurance of the loan risk. This protection was expected to stimulate shy capital into action as well as to encourage lending by institutions which had not previously entered the home-financing field on a large scale. The latter was particularly designed to induce commercial banks to enlarge the scope of their lending operations. The progress made in this direction is shown by the fact that, of the Title II insurance of $2,000,000,000 now in force, commercial banks account for more than 50 per cent.

The insurance of mortgage loans has provoked lively discussion as to its effect upon interest rates. First of all, on the theory that insurance washes out the risk differentials, a uniform rate is charged on insured loans. Precedent for such uniformity is found in other forms of insurance—such as life and fire insurance, where common rates are charged provided minimum standards are met. A second factor of significance is the rate of interest which is permitted. Section 203 (b) (5) gives the Administrator the authority to charge a rate (exclusive of certain other charges) not to exceed 5 per cent unless he finds certain unusual conditions in special areas, in which event he may charge not to exceed 6 per cent. Actually, the nominal rate of interest charged to date has not exceeded 5 per cent and in August, 1939, it was reduced to 4½ per cent. An insurance premium of ½ of 1 per cent (¼ of 1 per cent on loans up to $5,400 from February 3, 1938, to July 1, 1939) is added so that the minimum nominal rate is, in reality, 5 per cent at the present time, and 5½ per cent, formerly.

Such limitation of the interest rate takes on additional significance when related to the ratio of the loan to the property value and when considered in relation to the maturity of the loan obligation. As to the former, 80

per cent of the appraised value may be loaned where the principal indebtedness does not exceed $16,000, and up to 90 per cent where the amount is not greater than $5,400. In both instances, the loans must have a "maturity satisfactory to the Administrator" with a limit of twenty years for the 80 per cent loans and of twenty-five years for the 90 per cent loans. Justification for the more favorable terms given to the smaller loan category is primarily that of social expediency and is further supported by the stronger market for low-cost housing.

Reference to the National Housing act is restricted to loans made under Section 203, since for purposes of this discussion it is desirable to exclude any detailed statement of reconditioning and certain construction loans which are made under Title I, as well as loans for large-scale housing arising under Section 207, Title II. However, it may be said that in all categories there is a statutory limit restricting the rate which may be charged. It will be observed that the trend of legislation providing for housing on a non-subsidized basis gradually increased the scope of governmental influence and control over the interest rate. The Federal Home Loan Bank act of 1932 stipulated only a maximum legal rate which had long been recognized in state laws, or 8 per cent in the absence of such limitation; there followed the emergency financing of the Home Owners' Loan Corporation which permitted a rate up to 5 per cent; finally, the National Housing act established control over insured but private lending by fixing a maximum rate of 5 per cent, now set at 4½ per cent by regulation. It is difficult at this time to foresee any further rate adjustments.

Nature of Interest Rate on Home Loans. Having noted the various facilities and agencies which have been introduced to bring about more economical home financing, we may now turn to a consideration of its justification. This is all the more desirable since the rate of interest on home loans is no longer exposed to the full test of market action. Preliminary to this, however, it is important to distinguish between the popularly known nominal rate and the more significant effective rate of interest. Ordinarily, in financial parlance, the difference between the effective and nominal rate is caused by a spread between the contract rate and the rate which prevails in the market, or by other conditions which may cause an investment or loan obligation to sell at a price other than the principal balance.

In home financing, the term "effective rate" is used much more loosely, and is customarily interpreted as the total burden or overhead of carrying a loan. Thus, in addition to the cost of money, other incidental charges which are common in this field are included. The following illustration will give some indication of the possibilities in the case of an FHA or other loan for new construction where the rate of interest may be advertised as 4½ per cent.

Interest charge	4.5	per cent
Insurance fee	.5	
Appraisal fee	.3	
Initial service fee	2.5	
Reasonably certain charges	7.8	per cent
Additional possible charges:		
Brokerage fee	2.5	per cent
Title examination	1.0	
Credit report and miscellaneous	.2	
Total possible charges for first year	11.5	per cent

To determine the effective rate for the life of the loan, it is obviously necessary to spread the charges over the entire period. Thus, under a twenty-five year term, the effective rate would be less than in the case of a fifteen-year maturity. The logic of including many of these charges as a part of the cost of money is clearly open to question. For instance, the appraisal fee, the cost of title examination, and a part of the initial servicing fee, represent a cost for service which is distinct in character and not necessarily related to the loan itself. Nevertheless, practice has given currency to the inclusion of all such items. This means that the effective rate carries the connotation of the cost of the loan in its broadest sense rather than the limited concept of the cost of the money element alone.

There is also much variation in the type and in the amount of the fee levied for these miscellaneous services. Some lending institutions elect to charge no initial servicing fee at all; others may charge 1 per cent; but the maximum permitted on FHA loans is 2½ per cent on construction commitments and 1 per cent on refinancing loans. Lack of uniformity in the servicing fee and in the other incidental charges serves to retard the accurate measurement of effective rates and their comparison between competing institutions.

Soundness of the Present Rate Structure. The acid test of the present rate structure is whether it permits a self-sustaining operation. Some extremists take the position that this is immaterial because of the broad need for improved housing and that the condition is serious enough to warrant an outright subsidy. Moreover, it is pointed out that private institutions may escape the assumption of risk through the insurance of loans. However, such reasoning too often ignores the more important tests of soundness which are pertinent, irrespective of whether the activity be directed under government or private auspices. In the long run, regardless of whether the responsibility for the direction of any economy be private or public, there is a need to look to its self-supporting character. At least,

departure from this desideratum should be recognized in advance in order to provide intelligently for possible subsequent costs.

We may now apply certain criteria for the purpose of ascertaining the appropriateness of the prevailing rate on home loans. Five per cent may be said to be the most typical. Many large lenders are making loans at this rate and lower, and it becomes more or less of a standard by reason of FHA pronouncement. It will be recalled that the FHA has established a maximum rate of 4½ per cent to which may be added the ½ of 1 per cent insurance premium. Other incidental charges may be ignored because they are usually covered by specific assessment. The propriety and soundness of a 5 per cent rate may now be tested from the three following approaches: (1) sufficiency of the rate to absorb attending costs, (2) analysis of the underlying property risks, and (3) the ability of home-buyers to discharge the loan obligation.

In applying these tests, it is necessary to keep in mind the general character of the product being financed. Outstanding is the lack of standardization. Variations are found in the type of construction, the size of the house, the architectural design, and the quality and number of interior conveniences. In addition, geographical influences introduce many differences in the cost of labor and material. These variables definitely influence the development of low-cost housing, the area to which we shall direct our chief attention. Increasingly, housing policy recognizes the need for low-cost shelter; and recent lending operations indicate its adoption in practice. The following table shows the average size of home loans by the chief lending groups for 1939:

Insurance companies	$5,041
Commercial banks	3,256
Mutual savings banks	3,471
Savings and loan associations	2,526

Source: Federal Home Loan Bank Board, Mortgage Recording Statistics.

Sufficiency of Rate to Absorb Costs. The downward revision of the interest rate in recent years has undoubtedly been caused, to a great extent, by predetermined and arbitrary action of government. At the same time, the adjustment appears to be warranted as a correction of a previously high level, caused in large measure by the inadequacy of the financing mechanism to service home owners. But the danger of over-correction must be equally recognized. To determine whether or not we are approaching this point, it is appropriate to test the adequacy of existing rates to carry the regular and recurring cost of operation.

We may begin with the cost or rate which must be paid to attract funds with which the loans may be made. An important related factor is the term of investment of the funds provided. For instance, commercial banks are

surfeited with savings at rates ranging from 1 per cent to 2 per cent. At such cost, little difficulty should be encountered in making loans at 5 per cent; but this runs the risk of financing long-term investment with short-term funds. Where there is either stability or expansion of deposits, it is readily apparent that the practice may continue without disruption over a long period of time. On the other hand, any marked contraction of deposits must inevitably lead to embarrassment in carrying the loan obligations which continue over a much longer period. We need only to recall the conditions of 1932 and 1933 to realize the possible consequences.

Next, let us predicate judgment of the adequacy of a 5 per cent lending rate upon the cost of funds provided on a reasonable length of tenure. On this basis, a range from 2½ to 3 per cent would seem to be a minimum. This is indicated by the present yield on long-term direct government bonds (2¾'s of 1960-65 currently sell to yield 2.39 per cent) and the attraction of savings by private institutions at 2½ and 3 per cent. In the case of the United States savings bonds, 2.9 per cent is being paid for ten-year money. Increasingly, these baby bonds are creating a standard on the savings side comparable to the FHA approved rate in the lending area. It is reported that, during the month of January, 1940, alone, the sale of savings bonds amounted to approximately $250,000,000. For the entire year 1939, this form of savings increased at a more rapid rate than any other category. Only by means of insured deposits or insured savings accounts is it possible for private institutions to compete effectively for the attraction of savings.

Assuming a minimum rate of 2½ per cent to be paid on long-term savings, there must now be added a sufficient allowance to cover the normal operating expenses. To a great extent, this is a variant of size, larger institutions being able to operate at a lower operating ratio. However, a large portion of housing activity is found in smaller localities where the home-financing and banking institutions are necessarily limited in their expansion. If one were to eliminate the one hundred largest commercial banks, it would be found that the remainder would have an average size of approximately $1,725,000. In the savings and loan group, the average size for all associations is $668,000, and $970,000 for member institutions of the Federal Home Loan Bank System.

The experience of savings and loan associations shows that the operating ratio must normally be held within 2 per cent of the assets. This is the margin permitted to cover compensation, rent, advertising, and various other operating expenses. An allowance of 2 per cent may appear to be extremely thin, but it is considerably in excess of the average fee paid for the servicing of loans. The RFC Mortgage Company and the Federal National Mortgage Association, which purchase insured refinancing and new construction loans, respectively, allow from ½ of 1 per cent to 1 per cent as compensation for loan service. However, there is a lack of

broad operating data to support the reasonableness of this schedule. Also, it is often made possible because the major operating costs are covered by the income from the permanent loan portfolio of servicing organizations.

Particularly, may the question be raised as to the adequacy of a 1 per cent service fee in the case of smaller loans. The servicing of an $8,000 loan would likely cost no more than a $3,000 loan, yet on a 1 per cent basis, the former would provide an annual service fee of $80 at the outset, as compared with $30 in the case of the smaller loan. Hence, in view of the increasing emphasis upon low-cost housing, there is a greater need to appraise the cost of servicing loans of this type. Certainly, if a 2 per cent operating ratio were assumed as reasonable, it would appear that its addition to a 2½ per cent cost of money would bring the total operating cost ratio dangerously close to the lending rate of 5 per cent. Where the loan is insured, allowance should be made for the insurance premium of ½ of 1 per cent, making the operating cost equal to the interest rate.

Analysis of the Property Risk. The risk on residential property constitutes a subject in itself but only brief reference can be made to its broad influence upon the rate structure. Recent housing trends reveal a danger of "streamlining" the terms of financing without equalizing support from the basic property which underlies the loan. Comprehensive, technological improvement has been extremely slow in residential building, the production process having remained on a small-scale basis despite the introduction of large-scale economical methods in the industrial segment of the economy. Illustrative of the dominance of the small unit of production in the residential construction field, it may be noted that there are few contractors building more than one hundred units per year. Specifically, a distribution of contractors in thirty cities for the year of 1938 according to the number of units built, is as follows:

Number of houses per builder	*Builders*		*Houses constructed*	
	Number	Per cent of total	Number	Per cent of total
Total	2,891	100.0	9,697	100.0
1 house	1,735	60.0	1,735	17.9
2–4 houses	731	25.3	1,910	19.7
5–9 houses	250	8.6	1,610	16.6
10–24 houses	122	4.3	1,703	17.6
25–49 houses	34	1.1	1,129	11.6
50–99 houses	12	.5	783	8.1
100 houses or more	7	.2	827	8.5

Source: *Monthly Labor Review*, Oct., 1939, Bureau of Labor Statistics.

Already there is evidence of efforts to introduce large-scale construction methods in the residential field. Progress in this direction should mean considerable saving to the home buyer but, at the same time, would clearly be a source of loss on existing properties. As a consequence, there is created a conflict of interests, but one which is usually settled on the side of progress. However, to the extent that progress is made, additional burdens in the form of capital losses will be thrown upon the rate structure now in effect. In short, additional doubt is cast upon the sufficiency of any rate under 5 per cent to cover current operating costs and conjunctural losses which would arise through the acquisition of real estate by foreclosure.

Viewed more generally, there is need for awareness of the possibility of the servicing or financing program developing more rapidly than the underlying or supporting property element. The experience of the railroads in failing to advance plant development sufficiently to carry the capital structure is a timely reminder, indeed. Similarly, in the case of housing, it is important that the financial accommodation be not extended beyond the limits permitted by the property improvement or the capacity of the borrower to pay. Especially is there danger that the emphasis on low-cost housing may contribute to this condition. To reach the objective, there has been considerable pressure on the financial salient, but there has been failure to develop necessary and supporting adjustment in construction.

Ability to Pay. A final test of the sufficiency of the home-financing rate structure is to be found in the ability of the borrowers to pay. In fact, this may well be the all-important keystone. After all, if borrowers fulfill their obligations, the property risks are largely neutralized, and there is less need for a higher rate because of the absence of losses on the property account. Under the circumstances, it is important that careful attention be given to the various conditions which affect the ability to pay. In the last analysis, the ability to pay may be determined only by reference to each individual risk. However, there are certain over-all influences, such as the extended maturity of the loan obligation and its increased percentage of the appraised value, which apply.

Prior to the current decade, it was not common to loan for a period longer than approximately twelve years. Today, a twenty-year maturity is in general use and a twenty-five-year maturity is not unusual. Likewise, loans are now being made up to 80 per cent and 90 per cent of the appraisal as compared with 50 per cent to 60 per cent in earlier years. As a result, there is danger of the owner's equity being inadequate to cover property depreciation and other risks. To illustrate, on a 90 per cent, twenty-year loan at 5 per cent interest, the borrower's equity would amount to only 25 per cent at the end of five years.

On the positive side, due consideration should be given to the many

benefits which will be derived from the wider application of the regular amortization of home-loan obligations. Much of our earlier trouble was caused by inconvenient maturities whereby the borrower was confronted with a large, lump-sum payment. In times of easy credit, the lender proved more than willing to renew the loan, but, under the stress of depression, the shortage of funds prevented this escape. Undoubtedly, near elimination of the straight loan and the wide adoption of the direct-reduction plan will do much to give a resilience to home financing not previously possible.

To date, we have insufficient experience with the results of loan amortization to give complete assurance of the ultimate safety of the present financing pattern, but there can be no doubt of its vital importance. In a sense, homes are no longer being bought at a price, but, instead, terms are being sold. On this basis, the chief and determining factor of safety is to be found in the relation between the monthly payment and the monthly income of the home owner. If this is held to a reasonable ratio, there is good cause for hope that liberal financing may actually prove safer than the more restricted accommodation previously in force.

Conclusion. In conclusion, the following high-lights of the home-financing, interest rate structure of today may be noted:

(1) Present rates on home loans no longer are the result of relatively free, unimpeded market action. Instead, the chief governor of the prevailing rate may be said to be that which is established by the FHA for insured loans.

(2) To an increasing degree, a standard is being created for the attraction of savings by the growing popularity of United States Savings Bonds which pay 2.9 per cent for ten-year money. These bonds are an attractive investment and are bound to offer keen competition to private, thrift institutions.

(3) With limitations being developed on both the lending and the savings rate, the spread which is available to cover operating expenses is becoming precariously thin. In fact, there is some question of its sufficiency to cover all costs.

(4) An analysis of the soundness of a 5 per cent rate in the light of its sufficiency to absorb costs and of its justification on the basis of the underlying property risk and the ability of home borrowers to discharge the loan obligation, emphasizes the need for caution in making further rate adjustments.

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A COMPARISON OF INTERNATIONAL TRADE THEORIES

Discussion at a Round Table Conference of the American Economic Association, December 28, 1939. (See *Supplement*, March, 1940, p. 219.)

The theory of comparative cost has lately been replaced by more modern theories of international trade. This paper considers the relations between these different theories. Haberler's opportunity cost analysis emphasizes continuity with and similarity to the older doctrine by taking as data the scales of relative prices established by the pricing process. Ohlin's general equilibrium theory is simply a more general and explicit formulation of the opportunity-cost doctrine. Though Ohlin, like Haberler, demonstrates that mutually beneficial trade is possible only where relative price scales differ, he is less concerned with this result than with its underlying basis: the relative supplies of the productive agents.* Elaboration of this ultimate scarcity aspect of international trade is what distinguishes this theory and gives it superior explanatory value. For dealing with welfare problems, the abbreviated opportunity-cost version is handier. Both modern formulations differ from the classical in that they assume a multiple, the latter a single-factor world.

One of the leading objections to the classical theory of comparative cost has been that it takes as its point of departure the long discarded labor-cost theory of value. Adoption of this theoretical base put modern sponsors of the doctrine of comparative cost in the anomalous position of accepting, for those parts of their analysis concerned with a closed economy, the thoroughly modern theory of general equilibrium, while atavistically reverting, for any discussion of international relations, to the rejected Ricardian value principles. Recent years, however, have witnessed a thoroughgoing reformulation of the theory of international trade which unites it in a consistent fashion with the main corpus of equilibrium theory.

The modern restatement of the principles of international trade has been chiefly associated with the names of Professors Ohlin and Haberler. These writers have provided us with two alternative approaches to an analysis of international trade, that of the former being explicitly formulated as an extension of the general theory of equilibrium,[1] that of the latter being expressed in terms of opportunity cost.[2] In a recent paper,[3] Professor Haberler indicated, rather briefly, some of the main relationships between his approach and that of Professor Ohlin, as well as the line of connection which links his own theory with that of Ricardo. Except for these remarks, and occasional references in recent literature, I know of no discussion of these matters. For this reason, and because the relationship of the opportunity cost version of international trade theory to the general equilibrium theory, on the one hand, and to the doctrine of comparative cost, on the other hand, is perhaps less apparent than it should be, it may not be amiss to devote a few pages to the task of clarifying these interconnections.

[1] Bertil Ohlin, *Interregional and International Trade*, Cambridge, 1933.
[2] Gottfried von Haberler, *The Theory of International Trade*, London, 1936.
[3] Read at the Round Table, December 28, 1939.

Professor Haberler has already given the clue in saying[4] that "when stated fully and properly in terms of opportunity cost the theory of comparative advantage merges into a general equilibrium and interdependence theory," and that "a theory of comparative advantage in terms of opportunity cost is the logical development of the classical doctrine." With these statements there can be no disagreement. It is possible to demonstrate, however, that since the opportunity-cost version of the theory of comparative advantage is rarely fully stated (and this for a good and sufficient reason, as will appear), its merging with the general equilibrium theory is not immediately apparent. Moreover, it can also be shown that it is only *because* of this limited formulation that the logical continuity of the opportunity-cost theory with the classical doctrine of comparative cost is at all obvious.

Let us consider first this matter of continuity of doctrine. Professor Haberler's statement of the opportunity cost approach is logically based upon three assumptions:[5]

(1) The price of each factor equals the value of its marginal product;
(2) Under competition, all units of any factor have the same price in all uses;
(3) The price of each commodity equals the sum of its marginal money costs, which in turn is equal to the marginal factor payments.

On the basis of these assumptions, it follows that the exchange ratio (in one country) between any two commodities is equal to the relative value of the productive agents required to produce a unit of each at the margin. This relative value of the requisite productive agents is the "opportunity cost" of a unit of each commodity, and replaces the relative amounts of labor in the classical theory of comparative cost.

The transition from the older to the more modern comparison of costs is made: (1) by admitting the relevance of more than one productive agent (labor) to the problem of relative values; (2) by adopting a common denominator (money) to permit the summation of the contributions of many factors; and (3) by assuming as known the results of the pricing process which determines what these sums will be. Once the costs in two isolated countries have been expressed as values of the productive agents, it is possible to replace two separate series of relative labor costs by two similar series of relative prices which reflect the contributions of many factors (rather than merely labor) at the margin. By comparing the two series, it is obvious that the principle of comparative advantage, expressed in terms of relative prices, still holds. "Each country would specialise in those branches of production in which it had a comparative advantage, or, in

[4] In his recent paper, referred to above.
[5] *The Theory of International Trade*, p. 181.

other words, would produce those goods whose costs were relatively lowest."[6] Thus this modern theory of international trade appears strikingly like the older theory, indeed, a mere extension of the same reasoning from a one-factor world to a multiple-factor world.

Continuity is undeniable, and is *emphasized* by concentrating on the possibility of establishing, on a multiple *as well as* on a single factor basis, two or more series of comparable exchange ratios or relative prices. It should be noted, however, that the similarity as to results of the theory of comparative *labor* cost and the modern theory of comparative *opportunity* cost is the consequence of assuming the outcome of the pricing process. One breaks into this process by taking as data the consequences of competitive bidding for the factors of production. The term "opportunity cost," indeed, is merely a name for the results of this process of competitive bidding.

This leads to the other topic to be considered, the relation between the opportunity-cost version and the general equilibrium version of the theory of international trade. Basically, as this statement suggests, the two are simply different formulations of the same thing. Mr. Samuelson expressed the matter well in saying that "when stated with full qualifications, the doctrine of opportunity cost inevitably degenerates into the conditions of general equilibrium."[7] The moment one begins to justify the assumptions from which the opportunity-cost theory of international trade starts, by tracing them back to their roots, one embarks upon an elaboration of the general equilibrium analysis. When the assumptions of the opportunity-cost theory of international trade are fully explored, this theory becomes indistinguishable from the general equilibrium approach of Professor Ohlin.

The similarity of the two modern versions, as well as the reason for Professor Ohlin's more detailed analysis, may be further clarified if we look at these matters from a different point of view. As we have seen, Professor Haberler, by assuming the pricing process to have set uniform values on the marginal contribution of each of the factors, is able to proceed directly to the construction of a set of relative prices in each trading country. Barring unusual circumstances (the analysis of which he does not undertake), any two such scales of relative prices are bound to differ at some points, thereby establishing a situation of comparative advantage. Professor Ohlin also works toward an identical goal: namely, the demonstration that where relative price scales differ, the possibility of mutually beneficial trade arises. He, however, is less concerned with this end product than with the reasons *why* these series may be expected to differ from country to country. To secure this explanation, he takes us back to the

[6] Haberler, *op. cit.*, p. 182.

[7] Paul A. Samuelson, "Welfare Economics and International Trade," *Am. Econ. Rev.*, xxviii (June, 1938), p. 263.

supplies of the productive agents (and the incomes and desires of the public), which he finds differ widely from nation to nation. These differences are basic to his entire theory, and they are obliterated if we assume (as in the classical doctrine) that the supply of only *one* factor, labor, is directly relevant. These differences are also obscured by the opportunity-cost approach, for in determining its array of relative prices, these are expressed as the sums of various valuable collections of factors. This device of "valuable collections of factors" (at the margin), while useful in certain connections, lumps together *different* factors whose differing scarcity among nations constitutes the very essence of a thorough and revealing explanation of why international specialization and exchange take place. It is by concentrating upon the immediate value aspect rather than upon the ultimate and determining scarcity aspect that the opportunity-cost approach makes the older and the more modern theories of international trade appear in most essentials similar.

"Why international specialization and exchange take place": in this phrase, and in the question of the resultant volume and terms of trade, are to be found the main objectives of Professor Ohlin's analysis, as Professor Haberler has pointed out. For attacking these problems, it seems to me incontrovertible that the Ohlin approach furnishes the most adequate and realistic set of analytical tools. Since international price differences are the principal immediate cause and regulator of trade, a satisfactorily complete explanation must unavoidably analyze in some detail the chief reason for their existence: the widely varying degree to which different lands are endowed with the productive factors. For dealing with the welfare problems of the gain from trade, however, this detailed discussion of why prices differ and why, therefore, geographical specialization and trade follow the lines they do, is superfluous. The theoretical explanation of the source and course of trade may be taken for granted, and attention directed to the alternative costs, in terms of income foregone, of using productive resources to produce goods at home or to acquire them by producing exports. This approach to the normative aspects of international trade thus, by telescoping these parts of the complete theory which are irrelevant to its problem, acquires the merit of simplicity.[8]

In conclusion, it may be admitted that the primary difference between both versions of the general equilibrium theory of international trade and the doctrine of comparative labor cost is that one assumes a single factor

[8] This is not to say that normative problems can be attacked only along the lines of the opportunity cost doctrine, but not with the tools of general equilibrium theory. Any proposition to this effect would be contradictory, since the opportunity-cost theory is merely an abbreviated version of general equilibrium. Indeed, where the total amounts of the productive factors change with trade, analysis of the gain necessitates resort to the broader theory. On this point, see Paul A. Samuelson, "The Gains from International Trade," *Canadian Jour. of Econ. and Pol. Sci.*, vol. 5 (May, 1939), p. 195.

of production, the other a multiplicity. The same is true of the Ricardian labor-cost theory of value and the Paretian schema of general equilibrium, to which the two contrasted bodies of international trade theory are related as part to whole. This difference, however, is one of considerable moment—so considerable that we no longer use the Ricardian value theory: its assumption of a single value-determining factor of production is so far from reality as to make it a clumsy and distorting instrument of analysis. And while no one could deny that the modern theoretical structure is the lineal descendant of the older, it has always seemed to me to be confusing rather than helpful to emphasize the similarity between the opportunity-cost and the comparative labor cost doctrines. Especially is this true when one considers that such similarity as exists is the result of suppressing that portion of the modern theory which is distinctively different.

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UNION WAGE AND HOUR POLICIES AND EMPLOYMENT

Paper presented at a Round Table Conference of the American Economic Association, December 28, 1939. (See *Supplement,* March, 1940, p. 227.)

In manufacturing industries and in bituminous coal mining, wage rates since 1933 have been greatly increased and hours of work have been substantially reduced. Proponents of these changes have insisted that such wage and hour policies would increase total purchasing power and increase employment. The evidence presented below does not substantiate these claims. In fact, employment in bituminous coal mining was lower in 1937 than in 1929 when production was not so great, and employment in 87 manufacturing industries was slightly lower in 1939 than in 1929 when production was about the same. In bituminous coal mining and in manufacturing industries money payrolls were about 10 per cent below those of 1929, although, owing to a decline in the cost of living, real payrolls were higher than in 1929.

A more detailed study of bituminous coal mining shows the changes in per capita income, employee productivity, mechanization, costs, and sales income that were associated with increases in wage rates and decreases in hours that were introduced beginning in 1934.

There is no one wage and hour policy to which all unions subscribe. Generally speaking, unions like most employers sell their product at the best price and under the best conditions that they can obtain. What price they can command depends on many factors. In the short run if the industry is a profitable one, as for example petroleum refining and automobile manufacturing, and if the union has substantial bargaining power and its leadership is able and aggressive, relatively high wages and short hours of work may be attained. On the other hand, if the industry is faced with ruinous competition and overdevelopment, as for example in cotton and certain other textile industries, particularly if the scope of union organization is not industry-wide, the workers will have to content themselves with *relatively* low annual earnings and with relatively long hours.

Other factors which affect wage and hour levels are (1) the character of the demand for the product, that is, whether the demand is elastic or inelastic, (2) the proportion that labor costs constitute of the total cost of production, (3) the economic organization and financial structure of the industry, (4) competition from substitute products, (5) general business conditions, and (6) the relation of capacity to demand. Because of the operation of these factors, wage and hour levels and policies vary by regions, markets, industries, and often establishments.

In a number of industries, unions, like employers in numerous instances, have successfully maintained the price of their product during periods of drastic deflation. In the anthracite industry, for example, the union has not taken a single wage reduction since the Award of the Anthracite Strike Commission of 1903 and in the building and construction industry it is not uncommon for organized crafts to retain their nominal wage rates during periods of depression. In other industries, unions, like employers on numer-

ous occasions, have taken substantial cuts in the price of their product when faced with economic conditions which required such action. Witness the ten per cent reduction taken by the railroad workers in 1932 and the 60 per cent reduction accepted by the union in the full-fashioned hosiery industry during the years 1927 to 1932.

Some idea of the variations in wage and hour levels and policies is disclosed by an analysis of wage and hour data published by the Bureau of Labor Statistics for manufacturing industries. In 71 of the 87 industries at present included in the Bureau's survey, data were available for both 1933 and 1939. An analysis of these data for the months of May, 1933, and May, 1939, brings to light some interesting facts. During the six years beginning in May, 1933, the increases in hourly earnings ranged from 19.5 per cent in the book and job branch of the printing and publishing industry to 105.2 per cent in sawmills. Thirty-four industries, or about 48 per cent of the total, showed increases which amounted to 50 per cent or more. In fifteen industries the increases ranged from 60.0 to 69.9 and in five from 70.0 to 79.9 per cent.

The data for average weekly hours of work, not standard or maximum hours, also show wide variations. In 27 of the 71 industries, or 38.0 per cent of the total, average hours of work actually increased between 1933 and 1939. All but four of these industries, however, were durable goods industries whose volume of production undoubtedly had been greatly curtailed by the depression. Of the remaining 44 industries the reductions in average weekly hours below the May, 1933, level ranged from 1.0 to 33.1 per cent. In 22 industries reductions ranged from 0.1 to 9.9 per cent, in 15 from 10.0 to 19.9, in six from 20.0 to 29.9 per cent, and in one the increase was 33.1 per cent.

While economic conditions and union leadership have resulted in different wage and hour levels and the application of different wage and hour policies, it should be recognized that union leaders are in common agreement that workers must obtain a greater share of the national wealth and income. To attain this end many of them, notably since 1933, have strongly advocated the raising of the rates of pay as a means of increasing purchasing power and the reduction of hours of work to increase employment. In this they have been aided by federal legislation in recent years. It is not surprising, therefore, to find that in the 87 industries for which the Bureau of Labor Statistics compiles information, average hourly earnings between May, 1933, and May, 1939, have increased 53 per cent and weekly hours of work have been reduced 6.9 per cent below the abnormally low level that prevailed in May, 1933. How do the wage and hour levels of May, 1939, compare with those prevailing in May, 1929? According to the data published by the National Industrial Conference Board for 25 manufactur-

ing industries or groups of industries, hourly earnings in May, 1939, were 21.6 per cent higher and weekly hours 24.9 per cent lower than their respective levels in May, 1929.

One wonders whether any other period in American history has witnessed such drastic changes in the rates of pay and weekly hours of work. The achievement is all the more impressive in that the cost of living between May, 1933, and May, 1939, increased only about 10 per cent. Unions, however, cannot go on reducing hours and raising wage rates indefinitely. At some point the union will have to shift its demands to other aspects of industrial relations.

What have been the economic consequences of these drastic revisions of wage and hour levels upon costs, prices, profits, mechanization, annual wages, and opportunity of employment? Do shorter hours of work make for fuller employment and do higher wage rates improve the standards of living of workers?

Some light can be thrown on the answers to these questions by an examination of recent developments in the bituminous coal industry.[1] In April, 1934, the operators and miners in the Appalachian fields signed wage contracts that provided for reductions in hours of work and for substantial wage increases. The terms of the wage contracts were embodied in the Coal Code and applied with modifications to outlying fields by the N.R.A. As a result, daily hours of work were reduced from eight to seven, weekly hours from 40 to 35, and rates of pay were increased about 22 per cent, the rate of increase varying by occupational groups and by fields.[2] The average hourly earnings of all employees equalled approximately 71 cents and daily earnings about $5.00 after the new agreement went into effect. It is with the effect of these adjustments that this paper is primarily concerned.

Effects of the April, 1934, Agreements on Costs, Sales Income, and Margins.

The N.R.A. compiled cost and income data for fifteen months, November, 1933, to January, 1935, for approximately 1,000 mines located east of the Mississippi River. The combined production of these mines amounted to 61.7 per cent of the total output of the industry in 1934. The cost data that were compiled by the N.R.A. did not include interest payments on investments or taxes on income and unassigned acreage.

[1] For a more detailed discussion of developments in the bituminous coal industry see *Economic Consequences of the Seven-Hour Day and Wage Changes in the Bituminous Coal Industry,* by Waldo E. Fisher, University of Pennsylvania Press, 1939.

[2] Based on data published by the Bureau of Labor Statistics for bituminous coal mines in monthly issues of *Employment and Pay Rolls.* To compute the changes in hourly earnings resulting from the adjustments made in April, 1934, the author took the average hourly earnings for the four months preceding and the four months following the month of April.

To determine the effects of the April adjustments in hours and wages on costs it was necessary to select comparable months before and after April, 1934, that is, months in which the volume of production and the number of days worked were about the same. Such a procedure was necessary because per ton costs of coal rise with great rapidity as the number of tipple starts or days worked approaches zero and the production of coal is curtailed. The months selected for the pre-agreement period were December, 1933, and January, 1934, and those for the post-agreement period were December, 1934, and January, 1935. What effects did the seven-hour day and wage changes have upon costs and sales income?

Total reported costs increased 22.7 cents or 14.5 per cent; labor costs increased 16.8 cents or 18.5 per cent; costs of supplies, 2.9 cents or 12.6 per cent; and total producing costs 20.3 cents or 14.3 per cent. The fixed costs for which data were segregated on the cost reports—namely, administrative expenses, costs on a fixed lump-sum basis, mine supervisory and clerical costs, as well as mine office expenses and salaries and expenses of other employees distributed to the mine—showed an increase of one-half cent a ton. Mixed costs, that is, cost of supplies (including power purchased and mine fuel) and selling expenses, increased about five cents or 14.7 per cent, and direct costs, 17.6 cents or 17.9 per cent.

Sales income per ton was increased 29.5 cents or 18.3 per cent. In other words, the entire increase of 22.7 cents a ton in total reported costs was passed on to the consumers together with an additional charge of 6.8 cents a ton. In the selected two-month period following the wage and hour adjustments, operators' margins were 10.9 cents a ton. This figure should be compared with 4.1 cents a ton, the amount received during the selected two-month period before April, 1934. These margins, it should be noted, do not represent net earnings. The operating companies still had to pay interest on investments as well as taxes on income and in some cases on unassigned acreage.

The behavior of costs, sales income, and margins for the industry as a whole cannot be taken as representative of what happened to the individual coal fields. Actually the impact of the wage and hour adjustments upon the various fields showed great variations. This was to be expected because, while the reduction in hours was the same throughout the industry, the increases in the rates of pay were far from uniform. The increases in labor costs ranged from a low of 2.7 per cent in Indiana to a high of 28.4 in Alabama, Southern Tennessee, and Georgia. The increases for producing costs ranged from 2.8 to 23.6 per cent, for total reported costs from 3.9 to 22.1 per cent, and for sales income from 11.0 to 26.3 per cent.

The operators in most of the districts, however, were able to improve definitely their financial position as far as margins were concerned, but the extent to which this was done differed greatly in the various fields. Only

three fields were unable to pass the total increase in costs on to the consumers. Although most of the operators were able to improve their financial position, it should not be assumed that the margins were too high. Data for measuring profits and losses were not available.

In passing, it should be pointed out that the wage and hour revisions did not improve the competitive situation within the industry. In the case of both labor and total costs the spread between low and high costs was greater after the April adjustments than that which had prevailed prior to April, 1934. The coal mines in Indiana and Illinois definitely improved their competitive standing in the industry.

Some Other Economic Consequences

The effects of the seven-hour day and wage changes upon costs, sales income, and operators' margins, although of major importance in any discussion of wage and hour policies, are incidental to the particular aspect of the problem under consideration at this session. Let us, therefore, examine the effects of the April adjustments on employment, annual income, and related factors.

The months and years immediately following the wage and hour revisions were characterized by a marked improvement in production, employment, and other business indicators. Much of the gain occurring in these years must be attributed to the general forces of recovery that followed in the wake of one of the worst depressions in American history. To determine the net effects of the wage and hour revisions on employment, annual per capita income of full-time employees, and total payrolls, it was necessary to remove the cyclical influences that were at work during these years. This was accomplished by the use of such common denominators as millions of tons and 200-days worked.

The introduction of the seven-hour day and the accompanying increases in the rates of pay was immediately followed by a 10.0 per cent drop in output per man per day. To meet their market requirements during the twelve months beginning with April, 1934, the operators added more men to their payrolls and increased the number of days their mines worked. As a result man-days per million tons produced increased 8.1 per cent. Per capita income of full-time employees per 200-days of work rose 14.9 per cent, and the total wage bill per million tons produced increased between 31 and 35 per cent.

Faced with substantially higher labor costs (18.5 per cent above the level prevailing during the selected months prior to the April agreements) as well as a 10 per cent reduction in employee productivity, and finding themselves in a somewhat better financial position, the operators placed

heavy orders for mechanical loading equipment. In 1935, the proportion of the total output of deep mines that was mechanically loaded—which incidentally had remained practically stationary for the three preceding years—rose 10.7 per cent. By 1937 the proportion of the total output of deep mines that was contributed by this type of equipment stood at 20.2 per cent as compared with 12.3 per cent in 1933—an increase of 64.2 per cent.

With the extension of mechanical loading the output per man per day rose steadily. By 1937 it was only 1.9 per cent below the 1933 level. As the output per man per day rose, the opportunity of employment was reduced. By 1937, man-days per million tons were only 1.4 per cent above the 1933 level. Money per capita income, responding to two additional wage increases—one of approximately eight per cent in 1935 and another of about twelve per cent in 1937—continued to rise. By 1937, money per capita income of full-time employees per 200-days of work was 35.8 per cent and real per capita income 22.0 per cent higher than their respective levels in 1933.

What about the total wage bill? Did it continue to rise? The replacement of men with capital—although extraordinarily rapid during these years—did not begin to offset increases in the rates of pay which during the years 1934 to 1937 amounted to about 74 per cent. As a result, by 1937, nominal payrolls per million tons produced were 45.9 per cent and real payrolls 31.2 per cent above their respective 1933 levels.

To summarize, in the bituminous coal industry the immediate effects (within a period of nine to twelve months) of the seven-hour day and substantial increases in hourly or piece rates were:

1. Increases in all major cost items, but especially in labor costs, selling expenses, supplies, and total reported costs.
2. Increases in average sales income per ton that were greater than those required to absorb the additions to the cost of production. It should be noted that the increase in sales income was made possible by the power granted to the Code Authority to regulate prices under the supervision of the federal government.
3. Increases in operators' margins that placed all but three of the reporting fields east of the Mississippi River in a better financial position.
4. A material reduction in output per man per day.
5. A substantial increase in man-days worked per million tons of coal mined.
6. A substantial increase in the per capita income of full-time wage-earners per 200-days worked.
7. A very material increase in the total wage bill per million tons mined.

The economic consequences of the 1934 agreement plus additional wage increases in 1935 and 1937 over a period of three years, 1935 to 1937 inclusive, may be summarized as follows:

1. A sharp increase in the introduction of mechanical loading devices. It should be pointed out that it is impossible to say how much of the very rapid rise in

mechanical loading was due to wage and hour adjustments and how much to other factors such as the improved financial position of the industry and a more optimistic attitude among operators.
2. A steady increase in the output per man per day.
3. A loss in most of the gains in employment as measured by man-days per million tons produced.
4. Further material increases in both per capita income of full-time wage-earners per 200-days worked and in the total wage bill per million tons of coal produced.

Generalizations on the basis of these findings for the bituminous coal industry should be drawn with caution. In the first place, labor costs constitute an extremely high proportion of the total cost of mining coal—approximately 65 per cent. For this reason increases in labor costs should tend to raise prices to a greater extent in bituminous coal than in industries with a relatively low labor cost.

Second, much of the work done by coal miners involves heavy physical effort. One would expect a reduction of hours from eight to seven to reduce the output per man per day less for work of this character (because of the element of fatigue) than for work which is less strenuous.

In the third place, because it was possible in the bituminous coal industry to substitute instrumental capital for labor, the operators were able to overcome in part the loss in employee productivity and to reduce the number of men necessary to mine a given tonnage. This procedure could not have been utilized had the work been of such a nature that men could not be replaced with machines, or had the substitution of labor by machines and labor-saving devices practically been completed.

In the fourth place, the fact that many mines had been operating at substantial losses for a considerable time as well as the opportunity to regulate coal prices under the supervision of the federal government enabled the operators to pass on to the public an amount which was greater than the actual increase in costs. Under different circumstances in this decentralized, overexpanded industry such a procedure would not have been possible.

In the fifth place, the bituminous coal industry is greatly overdeveloped. As a result, when the output per man per day declined, the operators had the choice of working their mines more days per year or adding more men to the payrolls of the industry. In the absence of excess capacity and reduced working schedules, the introduction of the seven-hour day when accompanied by a decrease in employee productivity would require, in the initial stages at least, substantial additions to payrolls, assuming of course the same or increased demand for the product.

In the sixth place, the demand for bituminous coal in the short run is relatively inelastic and therefore the increased costs could be passed along to the consumers without an immediate effect on the volume of coal sold.

The result might well have been different if the demand were elastic.

Last, the wage and hour adjustments were made on the upswing of the business cycle which made it possible for the increased costs to be absorbed with less difficulty than would otherwise have been the case.

The economic consequences of the seven-hour day and substantial increases in hourly and piece rates in the bituminous coal industry were those which the orthodox economist would have predicted, except its effect on annual earnings. Even in this instance, were the demand for coal more elastic, his contention might well have been substantiated. It may still be borne out over a longer period of time if the higher coal prices caused by the shorter work-day and substantial wage changes result, as the operators maintain they will, in the more efficient utilization of bituminous coal or in the further growth of substitute fuels.

Up to this point our analysis has been confined to an examination of the net effects of the seven-hour day and wage changes since 1933. What light does a comparison of employment and earnings in 1937 with those in 1929 throw on our problem? For such a comparison, it is desirable to choose two periods showing the same level of production. Since identical levels, however, are not available, use was made of February, and March, months in which the 1937 production was about seven per cent above that of 1929.

Although hourly earnings of all wage-earners in 1937 were 20.2 per cent above those paid in 1929, the money wage bill was 11.0 per cent below. The real wage bill, however, was 5.5 per cent above the level prevailing in 1929. It is disturbing to discover that despite a reduction in standard daily hours from eight to seven and weekly hours from 48 to 35, the number of wage-earners employed by the industry was still 1.2 per cent less than the number at work in comparable months in 1929. Thus a 20.2 per cent increase in hourly earnings was accompanied by a loss of 11 per cent in money payrolls but by a 5.5 per cent increase in real payrolls because cost of living was still below the 1929 level. Moreover, a 16.0 per cent decrease in weekly hours of work failed to maintain a level of employment equal to that which existed in 1929 when production was about 7 per cent under the level prevailing in 1937.

Hourly Earnings, Payrolls, and Employment in Manufacturing Industries

What happened to hourly earnings, payrolls, and employment opportunity in manufacturing industries? Because manufacturing production in October, 1939, was about 2.0 per cent above the level of October, 1929, a comparison of the data on employment and payrolls for these two periods should be of interest. Hourly earnings in 1939 were 22.1 per cent above those paid in 1929. Nominal payrolls were 9.8 per cent below while real payrolls were 8.4 per cent above those paid out in 1929. Hours per week in 1939 were

20.9 per cent below 1929 and the number of wage-earners on manufacturing payrolls was 3.9 per cent less than those employed in 1929.[3]

We see, then, notwithstanding very substantial increases in hourly earnings, that the average nominal payrolls in 87 manufacturing industries as well as bituminous coal are still below, while real payrolls are from 6 to 8 per cent higher than, their respective levels in 1929. Moreover, despite substantial reductions in weekly hours, the number of wage-earners at work in these industries is slightly less than the number employed in 1929. Do these represent the accomplishments of almost seven years of feverish activity on the part of organized labor and the federal government to increase purchasing power by raising the price of labor and to increase employment by shortening the hours of work? This limited analysis does not give a completely satisfying appraisal of union wage and hour policies but it does suggest that over-emphasis on shorter hours and higher wage rates may not be the way to raise the standards of living of wage-earners in American industries.

The ardent proponents of the purchasing power and shorter hour theories will argue: "Well! We are not surprised. This is what we should have expected considering technological developments during these years." To this contention one can only say: "Under what conditions does the replacement of men and women with instrumental capital take place more rapidly—when wage and hour levels are related to changes in productivity that follow the gradual introduction of machinery, or when they are drastically revised in a few years in the hope of immediately attaining desirable objectives which may not be capable of realization in the short run?"

Of especial significance to us in the United States is the following comparison of recent developments in Great Britain and the United States that was published in *The Economist* (London) of July 1, 1939.

Between 1929 and 1938 the average hourly earnings of American workers (according to the figures of the National Industrial Conference Board) increased by 23 per cent. Relatively to the movement of average wholesale prices, the increase was no less than 49 per cent. But payrolls—the total amount of money paid out in wages—fell, according to the official index, by 18½ per cent in the same period. To place two figures in juxtaposition is not to prove that the one is the cause of the other. But it is at least suggestive that, while wage-rates in

[3] The percentages that wages (not including salaries) constituted of the total income paid out by manufacturing industries for the years 1929 to 1937 are presented below:

1929	1930	1931	1932	1933	1934	1935	1936	1937
59.9	54.6	53.3	53.3	58.0	60.2	61.0	58.4	58.7

It will be observed that in all years except 1934 and 1935 the wage earners' share of the total manufacturing income was less than in 1929. It is also important to note that total manufacturing income in 1937—the last year for which data are available—was still 13.3 per cent below the 1929 level. Robert R. Nathan, *Income in the United States, 1929-37,* U. S. Department of Commerce.

Great Britain rose over the same period by less than a third of the American increase, British payrolls (so far as they can be calculated) increased by 20 per cent instead of the American fall of almost the same proportion—and this in the country which is the more "mature" of the two.

I close this discussion of union wage and hour policies and their relation to employment opportunity with three questions:

1. What is organized labor's objective? To secure high wage rates, shorter hours of work, and perhaps higher annual earnings for a restricted number of employees in a given industry, or to improve the economic well-being of all employees in the industry?
2. If organized labor is concerned with the improvement of the economic status of all employees, have not its leaders in many instances been too much concerned with high wage rates and short hours and too little with total payrolls and maximum employment opportunity?
3. Will not continued emphasis on wage and hour levels occasion an even more rapid replacement of labor by machines and therefore aggravate rather than improve the unemployment situation?

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A NOTE ON CYCLICAL CHANGES IN DEMAND ELASTICITY

It has been argued that in areas of monopolistic competition, demand is less elastic in good times than in bad. This is called the principle of diminishing elasticity of demand by Mr. Harrod, who derives it from the common-sense thesis that in prosperity buyers are less willing to undergo the inconvenience of changing their customary avenues of expenditure.

This view has been supported, probably incorrectly, by reference to the cyclical behavior of advertising. Better support may exist in the timing of product innovations.

Against the principle of diminishing elasticity are many factors, such as the stability of transport rates and the incidence of reëmployment. The alleged increase in monopolistic agreements during the slump, and other arguments, point to countervailing rather than to invalidating influences. Measurements of the degree of monopoly suggest either that the principle is incorrect, or that countervailing tendencies are more powerful.

Sharp "corners" in demand curves as seen by oligopolists would in part support and in part discredit Harrod's thesis. Frequently irrelevant to his hypothesis are views such as that the demand for durable goods is less elastic in depression.

Increasing attention has been directed to the character of changes in demand elasticity during cyclical periods. Interest in this question has been based both on the relevance of the issue to cycle theory and on its relation to the explanation of the price policies of individual firms operating under conditions other than pure or perfect competition. The purpose of this note is to bring together a number of scattered comments that have recently appeared, and to add a few points to the discussion.

1. Mr. Harrod is largely responsible for raising the issue. Speaking of an economy in which competition is largely imperfect, he writes that ". . . imperfections may be expected to increase as the community gets more affluent."[1] If imperfection increases in good times this means that the demand for the products of individual sellers becomes less elastic than in depression. "If the generalization . . . is accepted, it might properly be named the Law of Diminishing Elasticity of Demand, which means that, as output as a whole increases and individuals become more affluent, their sensitiveness to price differences declines."[2] The basic reasons for this proposition he finds chiefly in the common-sense argument that people are inconvenienced by departures from their usual avenues of purchase. These inconveniences he views as of two sorts: the disagreeableness of thinking about "money . . . because it reminds them of the general limitations of the human lot and their own disappointments and frustrations," and the "more practical difficulties . . . within the business world itself" where "time and trouble" are required "to find the 'cheapest market.' "[3] Harrod goes on to argue that increasing prosperity leads to a condition in which

[1] *The Trade Cycle,* Oxford Press, 1936, p. 21. His "law" of diminishing elasticity of demand has provoked much discussion, as will be indicated in succeeding references.

[2] *Ibid.,* p. 21.

[3] *Ibid.,* pp. 20-21.

"habits become hardened" and part of the gains of prosperity "are taken out in the wastage due to not bothering too much." By contrast, individuals and businesses in periods of falling incomes "resent and resist the curtailment of their wonted pleasures," and business enterprises "must strain every nerve to reduce costs."[4] As a result, the demands for the products of individual sellers become less elastic in good times than in bad. We may add that in consumer buying, the element of conspicuous consumption, which tends to make disregard of price a virtue, must flourish more in boom than in slump; in the latter period prestige is often attached to bargain hunting.

Harrod is careful to differentiate this line of reasoning from a fallacious avenue leading to the same conclusion—namely, that the marginal utility of money declines with increases in income, and hence, that when persons are better off, an advance in price will be less of a deterrent to purchase than formerly. The fallacy involved, clearly, is that while a unit of money may be less significant to the richer community, so also is the marginal unit of any good purchased. "The ratio of the utility of the penny to the utility of the marginal unit of the commodity may in general be expected to be the same, and the same also therefore the deterrent effect on purchase of the rise of price by a penny."[5]

2. An additional support for the above thesis has been found by Professor Hansen in the cyclical behavior of advertising. He writes: "The existence of this law [Harrod's] appears plausible. It is certainly reasonable to suppose that imperfect competition, in Chamberlin's sense, flourishes during the boom. We know that advertising increases with good times, and that advertising serves to attach a clientele of customers to one firm."[6]

It seems extremely doubtful whether the cyclical behavior of advertising provides the support for the "law" suggested above. The influence of advertising cannot be judged by considering only its volume. It is necessary also to take account of a number of factors, including cyclical changes, if any, in the character of advertising appeals and in the *relative* position of different firms in this respect. We may consider three types of situations.

(a) Let it be assumed that there is no change in the character of advertising (*i.e.*, the emphasis on price *versus* quality of product is unchanged), but that the amount of advertising (measured either in total space or frequency, or both) declines in the same proportion for all sellers. In this case there should be little effect upon the relative position of rival

[4] *Ibid.*, pp. 86-87.

[5] *Ibid.*, p. 20.

[6] Hansen refers, however, to the rise of monopolistic combinations during depressions as an offsetting factor. A. H. Hansen, *Full Recovery or Stagnation,* New York, 1938, p. 58. This statement by the same author appeared in his article, "Harrod on the Trade Cycle," in the *Quart. Jour. Econ.,* May, 1937.

firms, and no *a priori* reason for supposing that a short-run reduction in advertising would reduce market imperfections and so increase demand elasticities. Product differentiation has developed in part as a result of advertising, yet a short-run diminution in the latter would not materially affect the amount of differentiation. The reverse might even be argued; if buyers are less exposed to selling efforts, they may in the short run be more inclined to continue purchasing at the "old stand," for alternatives are brought less to their attention and the force of habit operates against change.

(b) If, again, there is no change in the character of advertising, but some sellers in the slump cease advertising, or reduce it appreciably more than do others, the effect upon elasticities cannot well be predicted. If the firms curtailing advertising place more emphasis on direct price competition, the effect may be to increase the elasticities of demand. Otherwise the situation might be analogous to the simple case of a smaller number of sellers in a given market, with the likelihood of diminished elasticities.

(c) It is more probable that a change in the volume of advertising will be accompanied by a shift in its general character. The relative emphasis upon price rather than product quality may be altered. If depression brings a smaller volume of advertising, in which relatively greater attention is given to price considerations,[7] the effect may be to increase elasticities; if increasing emphasis is placed on trade names and quality of product, the opposite result may be expected. Of course, it is necessary to qualify this statement by differentiating sectors of the demand schedule. In depression, the issue is usually whether to leave price unchanged or to lower it somewhat. In this sector of the schedules, emphasis on the price factor would seem to increase the sensitiveness of buyers to price considerations.[8]

3. In addition to Mr. Harrod's own arguments, and the more doubtful defense of his thesis suggested by cyclical variations in advertising, it seems to the writer that considerable support may be found in the timing of product innovations. It is well known that periods of depression

[7] In discussing the effect of advertising (although without special reference to cyclical periods) Chamberlin argues that "the slope of the curve will be affected primarily when it is a question of price competition. . . . Imperfect knowledge in itself makes the demand curves for all products less elastic; advertising, through offsetting it, makes them more so." *Theory of Monopolistic Competition,* Cambridge, 1933, p. 118. Chamberlin seems to take little account, however, of differences between sectors of the schedules, or of short-run changes in the relative emphasis on price, or quality, by rival sellers in the same market.

[8] It should not be inferred that emphasis on product quality will necessarily decrease the downward elasticity of the demand for the product of any seller employing it. See A. L. Meyers, *Elements of Modern Economics,* New York, 1937, p. 146. Yet the general effect upon a *group* of rivals stressing product quality, rather than price, should be in this direction.

call forth strenuous efforts on the part of sellers either to introduce new products, or to push more strenuously the use of innovations already known but not yet marketed to any substantial degree. Such activities may be, in some instances, at once so overwhelmingly successful that demand in the relevant portion of the schedule is highly inelastic; frequently, however, such changes in products tend to reduce the degree of market imperfection and hence support Harrod's view that demands become more elastic in depression. It is generally admitted, for example, that the increasing introduction of non-railroad means of freight and passenger transportation during the 1930's has tended to increase the elasticity of demand for particular types and agencies of transportation.

4. Turning to specific objections that have been advanced against the "law" in question we find several propositions that seem logically valid, although their practical importance is difficult to assess. Mr. Gaitskell has called attention to the inertia of expenditure habits in the short run,[9] a factor that certainly must be important, especially in extremely short and minor periods of depression. The significance of this factor is probably affected materially by institutional circumstances. In the United States the buying of both business firms and individual consumers is doubtless less affected by custom and attachment to long established sellers than is the case in England. In the former country there seems to be less willingness to accept the doctrine of "live and let live," a greater tendency to shop and to bargain relentlessly in quest of short-run pecuniary advantages, and so a less strong tendency for habit to operate against the principle of increasing elasticity of demand. Witness the ability of motor car makers in the United States in 1939 to disarrange the steel price structure.

A partial denial of the inverse relation of economic conditions and demand elasticity has been found by Dr. Singer[10] in the prevalence of debt which tends to bind low income consumers to particular retailers during depression. He advances empirical support for the proposition that such buyers are able to search for the cheapest market (and hence tend to increase demand elasticity) only when economic conditions are improving. The increase of inelasticity in recovery and prosperity is further diminished, Singer argues, by the incidence of reëmployment. The previously unemployed are generally the older workers who are naturally more careful in spending and hence less inclined to give way to Mr. Harrod's temptations than younger workers. Moreover, there must often be substantial improvement in incomes before indifference toward price has a chance to develop. The importance of these factors, especially debt, doubtless also depends largely on the varying social and institutional characteristics of

[9] In a review of Harrod's book in *Economica,* November, 1937.

[10] H. W. Singer, "Another Note on the Law of Diminishing Elasticity of Demand," *Econ. Jour.,* March, 1938.

communities; in American retail trade it is probable that the credit policy of stores frequently leads poorer customers to shift their purchasing habits in bad times.

A fourth objection that has been leveled against the view that demand is more elastic in the slump has called attention to the possibility that the shifting of demand from sellers of high to sellers of low quality products may result during the slump in a lessened elasticity in the demand for each grade of product.[11]

5. Two further exceptions can be made to Harrod's thesis that elasticity and economic affluence are inversely correlated. In the case of commodities in which transport costs are substantial in relation to price,[12] the stability of freight rates in comparison with commodity prices may be an important factor. For inland transport rates tend to be much more stable than wholesale prices generally[13] with the result that in depression, areas of distribution and hence the number of sellers and demand elasticity, tend to decrease. A second exception may be found in some types of enterprise, notably various types of retail trade in the United States, where there may be a direct relationship between cyclical conditions and the number of competing firms. A reduction in the number of rivals will certainly tend to affect demand elasticities and may reduce them.[14] Recent American data indicate a direct relation between economic conditions and the number of firms in some divisions of retailing, although the evidence is far from conclusive.[15]

[11] R. F. Bretherton, "A Note on the Law of Diminishing Elasticity of Demand," *Econ. Jour.*, Sept., 1937. Mr. Bretherton also objects to the use of the "law" in *long-run* analysis because of (1) the importance of new products, and the possibly higher marginal real utility derived from increments of income due to created psychological need for them, (2) cases of greater elasticity resulting from pushing sales to lower income strata, and (3) instances of increased large-scale buying which may warrant greater care in purchasing. To these points might be added the broadening of market areas due to improved transportation and communication, and the improvements taking place in business methods, including the purchasing function.

[12] See Bureau of Statistics, Interstate Commerce Commission, *Freight Revenue and Value of Commodities Transported on Class I Steam Railways in the United States, Calendar Year 1930,* Washington (mimeographed), 1932, for the most complete statistical information on this subject.

[13] See John D. Sumner, "Public Utility Prices and the Business Cycle: A Study in the Theory of Price Rigidity," *Rev. of Econ. Stat.*, Aug., 1939, and R. C. Epstein and J. D. Sumner, "Effect of the Depression upon Earnings and Prices of Regulated and Non-Regulated Industries," *Am. Econ. Rev. Suppl.*, March, 1936.

[14] As Mrs. Robinson has pointed out, a reduction in the number of rivals does not necessarily reduce elasticities. The buyers formerly attached to the firms no longer existent may have so little preference for any one of the smaller number of firms remaining as to increase rather than to reduce elasticities of demand. *Economics of Imperfect Competition,* London, 1936, p. 71.

[15] See Data of the Bureau of the Census given in the *Statistical Abstract of the United States, 1938,* Table 832, for the years 1929, 1933 and 1935. Changes in classifications make conclusions hazardous; moreover, while the tendency seems present in some lines of

6. Many, and perhaps the most important, objections to the "law" do not in fact challenge its validity, but point to countervailing factors which tend to offset its influence. Several have invoked the prevalent assumption that monopolistic practices increase in depression periods, inducing sellers not to translate increased elasticity into price reductions.[16] In applying this argument to cycle theory it would be important to know more precisely than present information permits, the particular period of the cycle in which monopolistic practices are most likely to develop. Does the rise of monopolistic practices usually occur early in recession, or is this development usually preceded by a period of price cutting? Illustrations could be advanced to support either contention; it is probable that the answer varies both between different market situations and with changes in the knowledge and attitudes of business-men. Similar objections that might be advanced are fear of "spoiling the market," and the belief that price reductions may lead to the postponement of buying in the expectation of further price decreases. While these objections are important ones, they do not, as previously mentioned, invalidate the "law"; moreover, they are relevant only to those market situations where monopolistic agreements are otherwise practicable. Perhaps in some cases Mr. Harrod's law may be a factor further encouraging price instability, while in cases more favorable to monopolistic action, its presence may be an added inducement to combination because of the increased fear of price cutting engendered by increased elasticities.

Approximate and partial measurements by Kalecki[17] and Dunlop,[18] which show an increase during depressions in the "degree of monopoly" in Lerner's sense,[19] tend to indicate either that Harrod's thesis is wrong, or that its influence is more than offset by such factors as those just mentioned. Kalecki espouses the later interpretation and also mentions additional countervailing forces: "Mr. Harrod was rightly criticized in that there exist other factors which influence the degree of monopoly in the

trade, it is lacking in others. The most thorough study of changes in a particular locality is to be found in E. D. McGarry, "The Structure of Retail Trade in Buffalo 1929, 1933, and 1935—Grocery Stores," Bureau of Business and Social Research, University of Buffalo, *Statistical Survey Suppl.*, vol. xiv, no. 7A. See also his "Changes in Retail Trade in Buffalo, 1929, 1933, and 1935," *Census of Business*, U. S. Department of Commerce, 1938.

[16] See the reviews of Harrod's book by D. H. Robertson, *Canadian Jour. of Econ. and Pol. Sci.*, Feb., 1937; Joan Robinson, *Econ. Jour.*, Dec., 1936; and Alvin H. Hansen, *loc. cit.* It must be recognized, of course, that in so far as the rise of monopoly involves an actual reduction in the number of firms, elasticities of demand may be reduced.

[17] Michael Kalecki, *Essays in the Theory of Economic Fluctuations*, New York, 1939, ch. 1.

[18] John T. Dunlop, "Price Flexibility and the Degree of Monopoly," *Quart. Jour. of Econ.*, Aug., 1939.

[19] A. P. Lerner, "The Concept of Monopoly and the Measurement of Monopoly," *Rev. of Econ. Stud.*, June, 1934, where the degree of monopoly is used to mean the ratio of the difference between price and marginal cost to price.

opposite direction. For instance, in the slump, cartels are created. . . . More important still is the fact that in spite of the fall of prices of raw materials and wages some prices of finished goods tend to be relatively 'sticky' . . . for various reasons . . .," including fear of competitive price cutting and the belief by cartels that new competitors will not arise.[20]

7. An interesting approach to the question in cases of oligopoly has been advanced by Mr. Sweezy.[21] Placing emphasis on demand as estimated by the seller he has hypothecated a sharp turn or "corner" in demand as seen by oligopolists, a demand schedule which he believes to be quite inelastic at prices below the turning point (due to the expectation that rivals will meet reductions in price) and elastic at prices above the turning point (due to an expected failure of rivals to raise their prices similarly). He then suggests that general increases in demand may lead sellers to think that demand will be less elastic than formerly for upward, and more elastic for downward, movements of price. An upward movement in price will be thought of as encountering a more inelastic situation when demand is increasing, because of fuller utilization of capacity, difficulties of prompt delivery, and similar factors. Contrariwise, a general decrease in demand, Sweezy believes, will "have the opposite effect on the shape of imagined demand curves, making them more elastic for upward movements."

Thus this view both accepts and rejects Harrod's thesis—supporting the latter's argument that demand becomes less elastic in boom, while denying that it becomes more elastic in the slump. This assumes, of course, that in the first case the significant range of the schedule is that above the prevailing price, while in depression the significant range is that below the "corner" or turning point.

The above approach is salutary. Not only does it correctly place emphasis upon what sellers think is the demand situation, but it differentiates between upward and downward elasticities, a point neglected by Harrod. It should be remembered, however, that the argument is relevant only to those cases when the expected reactions of rivals are important factors in the price situation. Moreover, it obviously does not allow for the influence on imagined demand curves of sellers' views as to the reactions of buyers. The latter become highly important in those polypoly cases where expectations of rival reactions are not important, and in monopoly and duopoly[22] situations. But here a further complexity enters: granting that buyer attitudes are more elastic in the slump, the question remains whether

[20] Kalecki, *op. cit.*, p. 35.

[21] Paul M. Sweezy, "Demand under Oligopoly," *Jour. of Pol. Econ.*, Aug., 1939.

[22] Where products are homogeneous, Kristensen has shown that there will generally be only one price, set by the duopolist with lowest marginal cost. See "A Note on Duopoly," *Rev. of Econ. Stud.*, Oct., 1938.

sellers tend to an over- or under-estimate of changes in buyer attitudes. Probably no answer to this problem is possible which possesses any high degree of probability.

8. Before bringing this note to a close, reference should be made to several situations which might at first seem to refute the diminishing elasticity thesis, but which in fact do not. The idea has frequently been advanced that the durability of many types of producers' and consumers' goods leads to the deferment of replacements in depression years. Price reductions encounter an inelastic demand, due either to caution in the face of an uncertain future, or to the financial inability of the buyer.[23] But this is true only of the demand for types of commodities, and need have no direct effect upon the position of the sellers of differentiated products except in cases where the seller in a monopoly, duopoly, or oligopoly situation may consider the elasticity of demand for the general product, assuming that his own price reduction (in the last two situations) will be met by competitors. Thus Mrs. Robinson, for example, seems incorrect when in discussing changes in the elasticity of demand for individual sellers she states without qualification that a cyclical decrease in demand ". . . is likely to be accompanied by a reduction in elasticity in the case of durable goods, the replacement of which can be postponed to better times. . . ."[24]

The same general objection applies also to certain complementarity cases (*e.g.*, where a price reduction for electricity encounters a less elastic demand in depression due to the necessity of purchasing comparatively costly electric appliances if consumption is to increase materially); to cases of derived demand (where the price reduction of raw materials or intermediate goods may be ineffective unless the reduction is passed along to buyers of the ultimate product); or to some luxury products (the purchase of which may be largely discontinued by the previously elastic portion of the market). None of these situations invalidates Harrod's thesis save where, as stated, sellers consider primarily the demand for the general product rather than that for their particular, differentiated variety of it.

9. It would be gratifying if in conclusion one were able to write that "on balance," the principle of diminishing elasticity of demand is true or is false. Such a conclusion, unfortunately, seems out of the question; for the issue cannot be determined by a counting of the number of pros and cons discoverable. This discussion may be summarized by pointing out: (a) the common-sense argument advanced by Harrod in support of his own thesis (*i.e.*, that the amount of attention paid by buyers to price

[23] Galbraith, for example, in "Monopoly Power and Price Rigidities," *Quart. Jour. of Econ.*, May, 1936, states (pp. 463-464) that where demand for durable goods declines because of depression the "market comes to be composed more and more of very able and very needy buyers. Demand is less rather than more elastic."

[24] Joan Robinson, *op. cit.*, p. 73.

varies directly with their affluence) remains the best argument for it; the cyclical behavior of advertising, on *a priori* grounds at least, seems to add little or nothing to his proposition. (b) Additional support may be found in the introduction of product innovations in depression years. (c) Objections to his doctrine include the stability of transport rates, the incidence of reëmployment, the possible effect of a decline in the number of sellers during the slump, inertia of buying habits, the technical possibility that the shifting of buyers between high and low quality goods may result in less elasticity than previously, and possibly the existence of debt as a force tying buyers to sellers. (d) The cyclical incidence of various forms of monopolistic behavior does not invalidate the thesis, but measurements of the degree of monopoly suggest that its influence is not predominant. (e) The importance of the character of seller estimates of buyer (and rival seller) reactions to price changes must be emphasized, but in polypoly and in some oligopoly cases sellers may over- or under-estimate changes in the elasticity of buyer attitudes. Yet what the sellers think about changes in elasticity is what really matters.

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OBJECTIONS TO THE 100 PER CENT RESERVE PLAN

Certain objections to 100 per cent reserves are commonly overlooked. In case of bank credit, the real lenders are the depositors including, notably, the recipients of checks. It is these whose convenience waiting is combined and coördinated by the banks and made available to borrowers who pay for free banking service to depositors. The 100 per cent reserve scheme would make this free service impossible unless subsidized and might conceivably bring disappearance of deposit banking. Subsidization objected to; perpetual government debt as means to idea of 100 per cent objected to. Why precisely 100 per cent? A sacred number? Possible resulting growth of new type of financial institution through which we could still get deflation. Why henceforth deprive depositors of possibility of free banking service?

A number of economists who favor a managed currency, with the idea of promoting stabilization of the general level of prices, have accepted—a little too uncritically, I think—the idea of 100 per cent reserves. Objections which I cannot but believe have some importance, seem to have been generally overlooked.

One of the principal features of commercial banking, as we know it today, is free service to depositors, whereby business can be carried on by check and the clerical work of transferring credits from the makers of checks to the depositors of checks is done without fee—though the depression has brought in, to some extent, the service charge. It is because the banks have been able to "lend more than they have," because, in short, they have not been compelled to maintain a 100 per cent reserve, that they have been able to render this service to depositors without charge.

Of course the banks do not really lend more than they have, except as intermediaries or agents for the real lenders. What the banks do is to bring borrowers and lenders together. And the lenders are the bank depositors. Let us suppose the banks to lend, in the aggregate, several times as much money as they have on hand. The borrowing accomplishes nothing for those who receive the deposits until they use their newly acquired credit for the purchase of goods, by writing checks on this credit. When they have done this, they no longer have claims on the lending banks. But the recipients of their checks have these claims. Clearly, the banks could not thus lend more than they have on hand and have the lending mean anything, if the recipients of the checks drawn on this credit were, every one of them, to insist at once upon taking the money out of the banks. *It is the recipients of the checks,* therefore, *who are really the lenders.* They have given up tangible goods or services and are *waiting* for payment. For the checks they have received are but claims on the banks. And the recipients of these checks are still but claimants on the banks after the checks have been turned in, until they have actually drawn out the money owed to them or until they have, in their turn, made purchases and passed to others the claims they hold on the banks. These others then become the claimants on the banks. If all the borrowers of all the banks failed to repay, is it not

clear that depositors, even with our present limited deposit guarantee law, must lose? Is it not perfectly clear, therefore, that all of the borrowers (including drawees of commercial drafts) are the debtors, through the banks as intermediaries, of all the depositors?

The reason that bank depositors are willing thus to place their funds at the disposal of borrowers is that this lending costs them nothing. On the contrary, they reap an advantage from it. For thereby depositors avoid having to carry money in their pockets or to put it in large amounts into safes, with the consequent trouble and risk. Furthermore, no one of them has to remain a depositor—and, therefore, a lender—any longer than he chooses. For whenever he finds it convenient to do so, he can pass his claim on his bank to another, by check, in return for goods, and then that other becomes the depositor and lender and the former lender is a lender no longer. "Likewise, any one such lender—not, however, all at once—can cease to be such by demanding the money owed him, from the bank, whereupon the depositor of that money or someone to whom that depositor has given a check, becomes a lender."[1]

It is not necessary, here, to go into all the qualifications and complications of the argument. A further brief statement will make sufficiently clear its bearing on the problem of 100 per cent reserves.

> Depositors are, in general, persons who wish to have available buying power which they can use at any moment. Yet, almost invariably, few of these depositors do spend all of their accounts at once. There is an interval of hours—days—a week—during which they remain creditors who have a right to draw but do not draw and do not spend. And when they have passed this right-to-draw to others, the others in their turn wait, according to their convenience, before spending or drawing. Each depositor is in the position of a lender only so long as convenience dictates. Yet, in the aggregate, since one after another takes up the position of creditor or depositor, there is a great deal of this convenience waiting or lending. And the institution of commercial banking enables this convenience waiting, combined and coördinated, to be put at the disposal of borrowers. No one depositor is a lender for much or for long. But all of the depositors, together and in series, make possible the lending by banks of more than they have cash on hand. . . . This intermediary and coördinating function of banks cannot, however, be carried on without cost. And the demand for loans is great enough to throw the burden of this cost entirely upon borrowers, who pay it, in interest, for loans which, usually, cost the ultimate lenders nothing.

If a 100 per cent reserve requirement, without some compensating subsidy, should make this free service impossible, the check might, con-

[1] This and a later quoted passage are from my book, *Economic Science and the Common Welfare*, 6th ed., Lucas Bros., Columbia, Mo., 1936, part 1, ch. 4, in which the subject of convenience lending is developed more fully. See, also, article in *Quart. Jour. Econ.*, Aug., 1910, entitled "Commercial Banking and the Rate of Interest" and chapter 2 of part 1 of my *Principles of Commerce*, Macmillan, New York, 1916.

ceivably, become almost altogether a matter of history. For if depositors must pay a fee for the service it may be that many or most of them will prefer to keep large sums of money in their pockets, cash drawers and safes, despite the inconvenience and the greater danger of robbery, and pay bills by cash instead of by check. At any rate, such a possibility ought not perhaps to be entirely overlooked.

When I urged this objection on an advocate of 100 per cent money, several years ago, in correspondence, I was met with the suggestion that, rather than yield to it, deposit banking should be *subsidized* by government. My own view is that the price system is too much interfered with and warped by subsidies already and that a further spread of the principle of subsidization, with the consequent possible introduction of political influences almost inevitably involved, should be looked at with very great suspicion.

The 100 per cent idea has been put into a fancy package that adds markedly to its superficial attractiveness. We are told that the banks can be provided with the required 100 per cent reserves in government issued paper money, in exchange for government bonds, and that thus our great and growing national debt can be liquidated. The subsidizing of the clerical services of banks to depositors will merely, it is said, take the place of the annual interest burden on the debt. Or it is suggested that the bonds, though not themselves money, may be counted in the 100 per cent reserves, the government to stand ready to substitute money for these bonds in case of need, yet meanwhile to pay interest on them.

But the subsidizing must, apparently, go on forever. The debt *might* sometime be paid. In the past, it has been the policy of the United States to pay off its debt. Are we now to adopt the defeatist attitude that our national debt can never be paid, or even nearly paid, in the ordinary way, and so attempt to abolish it as a formal bonded debt by substituting a perpetual obligation to subsidize deposit banking and to subsidize it to an unforeseeable extent?

Is there no way to make deposit banking adequately safe and stable without a 100 per cent reserve? Must it be *precisely* 100 per cent in money, regardless of other value back of deposits? Is this precise 100 to become another sacred number? And is 100 per cent the *only* way of effectively stabilizing the price level? Is 70 per cent, 40 per cent and every per cent other than 100 utterly incompatible with any effective stabilization?

But some of the advocates of a 100 per cent system may contend that no subsidization would be necessary. They may contend—and who can say with certainty that they are wrong?—that depositors in general would gladly pay the full cost of the bookkeeping and clerical work involved in deposit and check service, rather than be deprived of this service and that

depositors would thus continue to leave on deposit with commercial banks substantially the sums they now leave. They may argue that the relative safety and convenience of the use of checks rather than pocket money are so marked as to make most corporations and individuals that now use checking accounts continue to use them. They may even point to the fact that some service charges have been recently made by many banks because of the decreased demand for loans during depression, and claim that such service charges have not caused depositors to withdraw their deposits. And, of course, the bookkeeping and other expenses of checking service might be kept down through the limitation of the use of checks to fairly large payments. But whether depositors, during years of prosperity, would continue to be depositors as largely as in the past, while themselves paying for all the expenses involved, in the form of service charges, would seem to be problematical.

The provision of free service to depositors, by making use of their convenience waiting, may, indeed, be made dependent on some sort of government subsidy, in the hope of thereby somehow preventing an alternate inflation and deflation which can be prevented equally well or better, in all probability, in other ways. It is by no means likely that inflationary and deflationary movements can be prevented *merely* by establishing a 100 per cent reserve system.

Let us suppose the 100 per cent reserve system established and let us suppose, even, that the reserves are so controlled as to appear to warrant the hope—in the view of the 100 per cent advocates—of a stabilized price level and stable business.

Nevertheless, it would seem that there might still be possibilities of sharp fluctuations in potential spending.

Even though deposit currency, as such, is thus rigidly controlled, what is to prevent the development of institutions, in boom times at least, to take deposits *not subject to check* but which depositors are allowed to withdraw on short notice (say three or four days) with the understanding that these deposits may be loaned or invested and that the depositors are to receive interest. Such institutions might be able, then, to induce many commercial bank depositors to keep their commercial bank deposits at a very minimum, relying on their ability to withdraw funds on short notice, when needed, from the interest-paying institutions. Since all would not need these extra funds at the same time, such an interest-paying institution could ordinarily rely on a considerable constant fund which it could keep invested or loaned. In other words, even though non-checking deposits were subject to withdrawal on short notice, not all of these deposits and, indeed, probably only a fraction of the total, would have to be kept in ready cash.

Thus there *might* be reintroduced in regard to such non-checking deposits, the system of partial reserves which had been legally ruled out for

deposits subject to check. And it can easily be shown that deflation would then be possible through the oscillation of deposits in such institutions, very much as in the case of the deposits subject to check in commercial banks.

For such institutions, just as in the case of less-than-100-per-cent-reserve deposit banks, would be a means of economizing money, of making a limited amount of cash do more work; and so, in case of a withdrawal of the cash relied on for reserve, and the consequent loss of this economy, there would be an effect similar to the effect of deflation of our modern commercial bank credit.

I have sometimes tried to bring home to my students in "principles" the way in which the sporadic waiting of depositors is put at the disposal of borrowers, by showing how this could happen without any formal deposit system at all, if only the convenience waiting of some could be effectively combined and coördinated individually. Thus, in a class of 100, I may point out how I might secure a loan of $50 for ninety days if able to find some member of the class with that sum which he does not immediately want, but which he is likely to want at any time, provided there are others, in series, who can take his place as lender to me whenever he needs his money. Thereby each member of the class has his money whenever he needs it and yet I, too, have the money when *I* need it. Money which might have served the need only of A and, later, of B, C, *et al.*, now serves *my* need while continuing to serve theirs.

Assume now, a financial institution which accepts the money of A, B, C and the others, promising to pay each on very short notice, yet, because there are always some who for the moment do not want their money, lending it to W, X and Y. But checks are not used, we shall suppose, since the law is assumed to forbid checking deposits without 100 per cent reserves. So W, X and Y withdraw in actual money whatever they borrow. Then suppose the development of such an attitude of mind among the depositors that few of them longer dare to leave their money on deposit. In that case, the money so withdrawn can no longer be spent by others in the intervals during which its owners do not individually desire to spend it. In other words, the withdrawal of this money by frightened depositors would have a deflationary influence even though the money was not a reserve for any checking accounts at all.

No doubt we might attempt legislation prohibiting any individual or corporation from taking any money from others for investment except on the understanding that such money is in no case to be withdrawn on less than sixty or ninety days' notice, so that this money cannot be, in effect, available spending power for two persons at the same time. But such legislation, interfering so greatly with the individual liberty of choice of those who have money, does not seem very probable. And in the absence

of such legislation, is it so unlikely that depositors in commercial banks which not only are unable to pay any formal interest on checking accounts but must even make service charges, should reduce their commercial bank deposits to a minimum and endeavor to secure some interest elsewhere to offset these charges?

And, of course, any anticipation of a falling price level may affect the velocity of circulation of money, altogether independently of the considerations detailed above.

If, then, the possibility of undesired and unplanned deflation would still be with us under a 100 per cent reserve system, if the gain from such a system is highly problematical, if methods of control such as open-market operations, adjustment of interest rates, etc., would still have to be resorted to, if the 100 per cent system might require subsidization and might result in purposeful perpetuation of the national debt, and if adequate safety and control can be had as well with a smaller reserve as with the sacred 100 per cent, then why must we deprive depositors of the privilege of receiving a sort of interest (in the form of free banking service) on their deposits?

We have a banking system which has grown up, through the centuries, in a particular way. There is reason to believe that we can, through wisely planned control, adapt this system to the need for a fairly stable standard of value. Unless it can be shown that it is practically impossible so to adapt it as well as that the 100 per cent system can be and is likely to be a much more effective and satisfactory way of attaining this end, it would seem better to cease turning our attention to such a system and, instead, concentrate on the task of working out less revolutionary changes and techniques for attaining the desired stability.

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100 PER CENT MONEY—THE PRESENT STATUS OF THE 100 PER CENT PLAN

Renewed activity on behalf of the 100 per cent plan of monetary reform calls for a reëxamination of some of its implications. Earlier criticisms in respect to the portfolio problems which such a plan would impose upon banks have been met satisfactorily by appropriate revisions. A serious criticism may still be raised on the grounds that the successful achievement of the aims of the 100 per cent plan requires the abolition of all short-term lending. The only valid claim which can be advanced for the plan is its superiority over the present fractional reserve system as a means of avoiding monetary deflation during depressions. Credit shrinkage during depressions arises from (1) voluntary loan repayments by borrowers and (2) forced liquidation imposed by banks in search of liquidity and protection against bad loans. Present advocates of the plan generally would permit the time deposit departments of banks to lend on short-term. Such loans would be subject to the same forces which now cause fluctuations in the volume of credit. Only by abolishing all short-term lending can credit shrinkage be avoided during depressions. Moreover, to free the banking system from pressure of deposit withdrawals, time deposits must be converted into long-term obligations thus depriving savers of the limited liquidity of time deposits. Finally, it appears that most if not all of the valid aims of the 100 per cent plan may be achieved within the framework of our existing type of banking without giving up its advantages.

The 100 per cent reserve plan for monetary and banking reform has again been brought to attention by a recent revival of previous proposals of the plan.[1] It appeared in 1933 in mimeographed form as the "Chicago Plan" and afterward appeared, in 1934, in Professor Simons' *Positive Program for Laissez Faire* and in Dr. Lauchlin Currie's monograph on the *Supply and Control of Money in the United States*. Professor Irving Fisher, who embraced the plan, first published his version of it in 1935.[2] A number of papers discussing the proposal have since appeared. Although some of these have criticized the plan from the standpoint of the problems involved in putting it into operation, in general they have approved of its basic principles.[3] It seems appropriate at this time to review the present status of the 100 per cent reserve proposal and to evaluate its possibilities and its limitations.

The only legitimate claim which can be made for the 100 per cent reserve plan is that it furnishes a better way to introduce control over the

[1] Six well known economists, in February, 1939, invited other economists to join them in approving the 100 per cent reserve plan with the aim of submitting recommendations to the President and members of Congress as a basis for reform of the banking and monetary mechanism.

[2] *100% Money.*

[3] Among these should be mentioned A. G. Hart's "The 'Chicago Plan' of Banking Reform," *Rev. of Econ. Stud.*, vol. ii, pp. 104-116; James W. Angell's "The 100 Per Cent Reserve Plan," *Quart. Jour. of Econ.*, Nov., 1935; and Frank D. Graham's "Reserve Money and the 100 Per Cent Proposal," *Am. Econ. Rev.*, Sept., 1936. A modification of Simons' previous position is contained in his "Rules *versus* Authorities in Monetary Policy," *Jour. of Pol. Econ.*, Feb., 1936. Also Professor L. L. Watkins has examined the plan in his recent study of "Commercial Banking Reform in the United States," *Michigan Business Stud.*, vol. viii, no. 5, 1938.

supply of money than any which might reasonably be provided under the existing banking set-up. Much of the discussion of the plan, however, has dealt with the question of proper criteria for the exercise of control over the supply of money by the proposed monetary authority. To that extent, therefore, it is beside the point so far as the merits of the 100 per cent plan are concerned. Similarly, the arguments in respect to the advisability of attempts to introduce appropriate monetary control for promoting business stability contribute nothing to the analysis of the desirability of the 100 per cent plan. Any plan for monetary control, whether based upon the conventional fractional reserve system or upon the 100 per cent plan, presupposes some significant interrelation between the volume of money and business fluctuations. Although the nature of these interrelations is significant in developing standards for monetary management, it is not germane to a discussion of 100 per cent money as such.[4]

The real expectation of gain from this plan lies in the belief that it furnishes an effective way to free the volume of money, in the form of checking accounts, from the effect of changes in the volume of banks' earning assets occurring in the different stages of the business cycle. With 100 per cent money only open-market operations of the monetary authority can influence the volume of such demand deposits.[5] In contrast, the present fractional reserve system is subject to but limited control through the power of the present banking authorities to influence the volume of available bank reserves. Although present or easily adopted controls seem adequate to impose necessary restraint upon credit expansion, present attempts to avoid credit shrinkage during depression are necessarily limited pretty much to pumping excess reserves into the banks. To compel their use is, of course, another question.

In general, comments upon the 100 per cent money plan have indicated approval of the effort to remove control over the volume of effective money from the forces which determine the volume of banks' earning assets.[6] In its original version, the plan provided that banks should obtain the required cash, needed to bring their reserves against demand deposits up to the full

[4] A. H. Hansen, in *Full Recovery or Stagnation,* 1938, pp. 111-119, questions the economic advisability of placing the economic system in a "strait-jacket" of neutral money of which 100 per cent money is a variant.

[5] Other advantages claimed for the plan include (1) the elimination of the need for deposit insurance, (2) the avoidance of inequitable seigniorage profits by commercial banks on their "coinage" of bank money and, (3) to the extent that the monetary authority takes over government securities to provide banks with reserves, the abolition of part of the burden of the government debt. This last claim is especially faulty since someone would have to defray the expenses of handling checking accounts now met in part out of interest on government securities held by banks. Moreover since the seigniorage profits of banks are largely distributed to the general public in free services, including checking accounts, the claim that the 100 per cent plan abolishes gross injustices on this score loses most of its force. For an examination of such arguments see Watkins, *op. cit.*

[6] Exception should be made of Professor Hansen.

100 per cent, by the sale of earning assets to the federal reserve banks or to the monetary authority. This proposed procedure was criticized by Angell on the grounds that it would create serious portfolio problems for the savings or time deposit departments of the banks.[7] Not only would the banks lose their best assets (government securities) but they would also probably have to dispose of other securities and commercial loans to obtain the necessary cash. This would present the serious problem of putting the monetary authority into the commercial loan field. He proposed that this difficulty be avoided by permitting the monetary authority to advance the required currency to the banks in the form of a non-interest bearing loan secured by a lien upon all the bank assets. Such a lien would presumably be subordinated to the claims of depositors and would be extinguished slowly if at all. The latest version of the 100 per cent plan adopts Angell's suggestion that the monetary authority make a loan of cash, without interest, in place of the earlier suggestion of an outright purchase of bank assets. An alternative suggestion in the latest version would permit banks to count their government securities, up to a specified maximum, as cash reserves. Banks would be allowed to convert such securities into cash by making demand upon the government.

A second criticism of the original version of the plan had to do with the danger that "near money" in the form of time deposits might be used as media of exchange in avoidance of the limits placed upon the volume of demand deposits. To meet this problem it has been suggested that time deposits be converted into long-term obligations. This would have the further advantage of freeing the banks of any danger from runs. The latest version of the plan, however, fails to make any attempt to meet this criticism save merely to provide that time deposits should be withdrawn only upon "adequate notice." The advisability of abolishing time deposits altogether may be seriously questioned. The sponsors of the plan, in its latest form, must be well aware that the possibility of any popular acceptance of such a drastic modification in the banking system is most remote.

There is yet another criticism of the 100 per cent plan which has received less attention than it deserves. This criticism is based upon the fact that the plan cannot achieve its basic objective of freeing the money supply from variations corresponding to variations in bank loans and investments without abolishing the whole short-term loan market.

Since the only valid argument which can be advanced in favor of the 100 per cent plan is that it provides better control over the volume of money than can be had under the present banking system, it must be judged on this basis. In so far as it fails to free the monetary system from fluctuations in the volume of effective money which now exist under our present

[7] *Op cit.*, Hart anticipated similar difficulties.

system, the case for the plan is necessarily weakened. One must inquire into the circumstances under which the plan may be expected to achieve its objectives and the extent to which it can provide more adequate monetary control than could be obtained under the present system. Only then can the advantages of undertaking the rather sweeping changes be estimated.

It is well recognized that during the upswing of the business cycle, banks utilize unused reserves which have accumulated during the previous depression as a basis for an expansion of loans and demand deposits. This upward swing may be accentuated by borrowing or rediscounting at the central bank to obtain additional reserves. Although opportunity for multiple credit expansion on borrowed reserves may at times cause some difficulty in imposing credit restraint by means of the rediscount rate, there is little question but that the federal reserve system, in the exercise of its present powers, can normally impose sufficient restraint to avoid difficulty from this source.[8]

Although the recent influx of gold has raised excess reserves to such a point that the reserve banks are scarcely able to maintain contact with the money market, even this abnormal situation can easily be met either by legislation permitting the Board of Governors to increase reserve requirements beyond the present limits, or by Treasury action in sterilizing gold imports by purchasing incoming gold with borrowed funds instead of the issue of gold certificates, and by increasing its deposits of idle balances with the federal reserve banks. It is correct to conclude, therefore, that the 100 per cent plan offers nothing in avoiding undue expansion of credit that is beyond the power of our monetary authorities under the present system. It follows, then, that the peculiar advantages which can be claimed for 100 per cent money rest almost solely in the possibility of avoiding an undesirable and deflationary decline in the volume of effective money during depression. In fact deflationary monetary factors which added to the distress of general business depression during 1929-1933 are the primary reasons for the support of the 100 per cent money plan.

To what extent and under what circumstances can the 100 per cent plan avoid a shrinkage in the quantity of effective money during depressions? First, one must grant that it would provide a method whereby central monetary authorities might control the absolute volume of existing money in the form of currency and checking accounts. However, the volume of *effective* money does not necessarily coincide with the volume of currency and checking accounts in existence at any given time. If, for any reason, part of the existing money becomes impounded by hoarding or otherwise, so as to take it out of the channels of trade, that part is not *effective* in

[8] This is possible by virtue of the power (1) to impose direct limits upon the volume of security loans, (2) to raise reserve requirements, (3) to deal in the open market, and (4) to exercise direct pressure on banks relying excessively on borrowed reserves.

the sense that one normally uses the term in relation to prices. Thus any impounding of part of the money in actual existence may be said to have reduced by this much the supply of effective money just as surely as if it were extinguished altogether by a reduction in bank credit under our present system.

The proposed 100 per cent money plan, as commonly stated, would permit the present lending operations of banks to continue. In fact one of the arguments used to enlist the support of bankers and others is that the plan need not interfere with bank lending functions. What would be the probable results of the appearance of a depression with its decline in business prospects? First, some voluntary decline in loans must be expected. The disadvantage of holding stocks of goods in the face of declining prices results in the accumulation of idle cash balances in the hands of businessmen. If they are in debt they will reduce their expenses by repaying their bank loans. This will occur under the 100 per cent plan in the same manner as under the present fractional reserve system. Similarly, if bankers begin to fear for the solvency of depression-harassed borrowers, they will demand repayment of loans and deny renewal privileges, regardless of whether the 100 per cent plan or the present system is in use. Under the 100 per cent plan these reductions in loans, both voluntary and forced, result in an accumulation of demand deposits and currency in the hands of the lending department of the bank to an amount equal to the reduction in loans.

It follows, therefore, that loan reduction increases the excess reserves of the loan department, and the volume of *effective* money in the hands of the general public is reduced by an amount exactly equal to the shrinkage in loans. One is forced to the conclusion that there is nothing in the 100 per cent money plan, in its common form, which will prevent these fluctuations in the available money supply arising from changes in the willingness of borrowers to borrow and changes in the willingness of bankers to lend. In order that the 100 per cent money plan may provide any reasonable cure for fluctuations in the volume of money arising from the above causes, it becomes necessary to modify the ordinary versions of the plan with the additional provision that all short-term lending be abolished. Only in this way is it possible to gain freedom from changes in the volume of money in the hands of the general public. But such a drastic departure from conventional banking practices is certainly not contemplated by most proponents of the plan. Professor Simons, however, recognizes this problem and now holds that to avoid forced liquidation of bank credit during depressions it is necessary to convert savings and time deposits of the present banking system into investment trusts without the privilege of making short-term loans.[9]

[9] *Cf.* his "Rules *versus* Authorities in Monetary Policy" in the *Jour. of Pol. Econ.*, Feb., 1936.

Although Professor Simons is undoubtedly correct in his position that the benefits of the 100 per cent money plan cannot actually be enjoyed without the termination of the short-term lending powers of the banks, it should be noticed that even such radical changes will not necessarily accomplish his purpose. To deprive banks of their power to make short-term loans would provide the powerful industrialists with a strong competitive weapon which they would be quick to grasp. Their command over cash could be expanded by the sale of securities, either stocks or long-term bonds. They might then extend credit to customers and to firms from which supplies are purchased. A slackening in trade or a loss in confidence would result in a contraction of such credits and a consequent increase in hoarding by the lenders. Of course even now trade credit of this type plays an important part in caring for the financial needs of weaker business units in the economic chain. To prohibit banks from making short-term loans must inevitably tend to drive a large volume of such borrowing into the field of trade credit. Moreover, the prohibition of short-term lending by banks would drive many business houses into the arms of the finance companies. It would indeed be a great day in the development of finance companies should the 100 per cent plan, implemented with a prohibition on short-term loans by the banks, be actually put into operation. But it would be intolerable to have tried to furnish the community with a controlled currency only to find the attempts failing because of an escape of short-term lending into the hands of finance companies and trade creditors.

It would be necessary, therefore, to abolish short-term lending not only on the part of banks but also by finance companies and industrial concerns. But to do this would deprive a multitude of small and middle-sized concerns of opportunity to obtain financial aid as occasions arise. The competitive advantage over small firms of the large firm, able to issue securities on favorable terms, would become even greater than at present. It is one thing to say that equity financing ought to be promoted as a desirable means of avoiding forced liquidation during depressions.[10] It is quite another thing to accomplish this for the small firm.

But were the 100 per cent plan, with rigid restrictions on all short-term lending, ever actually to be put into effect, its power to avoid shrinkage in the volume of *effective* money would still be limited. For instance, it would certainly prevent business-men from voluntarily reducing their borrowings in time of depression. But it could in no way prevent these same business-men from accumulating idle cash balances. Such hoarding, without question, would be responsible for the impounding of as much purchasing power as would normally be lost by voluntary loan reductions. It should be clear, therefore, that under no circumstances can the 100 per

[10] *Cf.* Simons, *A Positive Program for Laissez Faire,* p. 39.

cent plan do more than free the money supply from forced credit liquidation imposed by the banks.[11]

The advocates of the 100 per cent plan are especially impressed by the possibilities it offers during depression of freeing the banking system from deflationary credit shrinkage arising from deposit losses and bank failures. This credit shrinkage takes the form of both loan reduction and the sale of securities. Without question, during periods of acute depression, like that of 1929-33, such forced credit liquidation may become a serious thing. But here again, the 100 per cent plan, as most commonly advocated, offers little protection. Unless savings and time deposits are abolished and converted into long-term obligations it is still possible that a loss of confidence in a bank by the public might induce a slow run which would impose heavy pressure upon the bank. Such pressure could not be withstood unless the bank in turn could reduce its loans or dispose of securities to other banks or to individual investors. In order to provide adequate protection against forced liquidation of bank credit, it is necessary, therefore, that time depositors be deprived of the limited liquidity afforded by the usual form of time deposit. Moreover, depressions generate adverse trade balances in certain areas. To meet these adverse trade balances not only are demand deposits drained out (under the 100 per cent plan as well as under the present system) but time deposits, if allowed to exist, would also be utilized. To avoid such involuntary runs upon banks in depressed areas it is necessary, therefore, to abolish time deposits or convert them into long-term claims not subject to payment notice.

In summary, it appears that the 100 per cent plan offers little or no improvement in limiting credit expansion in boom times over the methods of control easily available under the existing banking system. Its only valid claim to adoption lies in the possibility that it will afford a means of avoiding deflationary shrinkage in the volume of money during depressions. Although it is impossible to prevent a voluntary reduction in *effective* money by business-men who will proportionately increase their hoarding if denied the privilege of reducing their borrowings, it seems probable that monetary shrinkage arising from forced liquidation of credit may be eliminated under the 100 per cent plan by abolishing all short-term lending and all time and savings deposits carrying the right to be converted into cash within any reasonably short time. The price of the 100 per cent plan in genuinely effective form is the complete abandonment of the right of

[11] Advocates of the 100 per cent plan would dismiss this whole argument by saying that the monetary authority could offset the effect of such credit shrinkage by an expansion of open-market operations. They neglect the fact that under the existing fractional reserve system open-market purchases by the reserve banks tend to increase deposits of individuals and firms, as well as the volume of bank reserves, to the same degree as if carried on under the 100 per cent plan.

business-men and others to obtain short-term capital and the right of savers to liquidity in their holdings. Without a short-term loan market a large part of the existing liquidity of long-term securities would be lost. While granting that in times of acute depression and panic the exercise by depositors of their privilege of converting deposits into cash may cause deflationary credit liquidation, one may still insist that the disadvantages and inconveniences to savers arising from an almost complete loss of liquidity can hardly be dismissed as inconsequential. One may likewise insist that the existence of a short-term loan market furnishes economic advantages in the form of flexibility which must be weighed against the advantages expected of the 100 per cent plan.

It is pretty generally agreed that the 100 per cent plan is by no means the sole method of avoiding forced liquidation arising from depression deposit shrinkage. Experience of Canada and England with strong branch-banking systems indicates that it is entirely possible to operate a fractional reserve banking system and still escape forced liquidation arising from currency hoarding and withdrawals due to sectional adverse trade balances. Moreover, such systems seem able and willing to substitute security holdings to replace loan shrinkage resulting from loan reductions due to voluntary repayment by borrowers and forced liquidation due to the banker's fear of borrower insolvency. Large, widespread branch-banking systems are able to do this mainly because of their relative freedom from deposit losses in depression and their greater immunity to failure.[12] In spite of the unpopularity of branch banking in some circles in the United States and the genuine difficulties which would be encountered in attempting to develop nation-wide branch systems similar to those in Canada, one can hardly avoid the conclusion that such a method of preventing forced liquidation of credit is to be preferred over the much more drastic method imposed by an effective form of the 100 per cent plan.

Even without the adoption of branch banking it is not entirely impossible to free our present banking system from a large part of the danger of runs and forced liquidation. Improvements in banking practices, better management of banks, adequate capital, appropriate amounts of secondary reserves, improved facilities for meeting emergencies by converting assets into cash through borrowing upon non-eligible paper at the federal reserve banks, the introduction of federal deposit insurance with more careful supervision, all contribute substantially to the ability of the unit bankers to meet depression without resorting to forced liquidation of credit.

[12] Canadian banks during the depression (1929-33) showed a decline of deposits of about 20 per cent. The joint stock banks of England and Wales showed a deposit decline of 8.5 per cent between 1929 and 1931. Neither banking system showed any indication of forced liquidation due to fear of runs. In both, reserve ratios fell slightly and in both, banks were "loaned up." In the United States, member bank deposits declined during the period from 1929-33 by 33⅓ per cent.

The choice presented by the 100 per cent plan is not such a simple one as its proponents would have it seem. Far from permitting banks to carry savings and time deposits and to continue "to lend on short term,"[13] the plan requires the abolition of both of these privileges. In contrast, equal freedom from forced liquidation arising from deposit withdrawals can be achieved by branch banking and to a large extent by improvements in the existing unit banking system. In the last analysis the 100 per cent plan, therefore, offers to accomplish only one thing which seems incapable of being accomplished with equal facility under the fractional reserve system. It does properly promise to rid the economic community of danger of a decline in the volume of demand deposits due to fear of borrower insolvency during depression. But to accomplish this it requires that all short-term lending of every sort be abolished, and that savers be deprived of income-earning deposits bearing withdrawal privileges. When viewed in this light the claims made for the 100 per cent reserve plan lose much of their glamour.

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[13] Graham, *op. cit.*, p. 440.

RAILROAD COSTS IN RELATION TO THE VOLUME OF TRAFFIC

The fact that for the railroads, as for any enterprise, the cost of production is affected by the volume of product merits some further consideration. This is true particularly with respect to the *relative* variability of the several items of cost. When the four main divisions of expense for the Class I railroads are compared with the variations in traffic volume over the period from 1922 to 1938, it is found that the items which vary most closely with traffic are actually those which have commonly been presented as comprising the largest "constant" components (and conversely).

This failure of the facts to support the common pronouncements results from the implicit assumption of standards which are essentially rigid. This assumption, and the pronouncements based upon it, do not hold for periods longer than approximately a month. When considered over a longer period the variable element in all operating costs stands out as the dominant characteristic. This has some significance in connection with the doctrine of increasing returns; for the extent to which costs are variable directly affects the increase in returns, as the volume of traffic increases.

The point has been made frequently that fixed or constant costs absorb an abnormally large portion of the income of a railroad. The term "constant costs," as used here, refers to those elements in the expenses of a railroad which are essentially independent of, or not functionally related to, the volume of business handled. This constant characteristic has been pointed out particularly with respect to maintenance expenditures, and general expenses. Ripley has said ". . . only about two-thirds of the total expenditures of a railroad are applied to operation, the remaining third being devoted to capital account. Moreover, of these two-thirds of the total applied to operating outlay, only about one-half responds to *any* change in the tonnage, the other half being constant up to a certain point."[1] What this point is Ripley does not say. He admits that the statement implies a given standard of service, and maintenance, as well as a given stage of technological development, but apparently does not consider it necessary to develop the point. That the "constant costs" grow with the growth of traffic over a period of years, however, is implicit in his contention that they remain about two-thirds of the total.

The use of the term "constant" in referring to any costs is dangerous because it suggests an invariability which does not exist, even for relatively short periods. Moreover, no costs are altogether independent of the volume of business. Given a certain volume of business, on the average, for a period of time, then certain expenditures will be made whether that volume of business is moving at the moment or not. But in any business the cost of production is affected by variations in the volume of product; and this is true for *all* costs when the variations are large, or extended over a considerable period of time. Railroads are not essentially different from other enterprises in this respect.

The difference in variability among the several elements of cost is essentially relative. The relation of costs to the volume of traffic may be either direct or indirect. This more accurately states the difference between

[1] W. Z. Ripley, *Railroads, Rates and Regulation,* pp. 53-55; italics mine.

the so-called constant costs and the acknowledged variable elements. In the long run this difference tends to lose significance. Lorenz goes to some pains to make this clear in his study of out-pocket-costs (p. 2).[2] What have been considered frequently as constant costs cease to be constant as soon as the basic period of comparison assumes any appreciable length. Lorenz also makes clear the relation between the ratio of "constant" to variable costs and the density of traffic.[3] Clark has pointed out that what these statements with regard to the relative constancy of railroad costs really mean is "that *certain kinds of variations in traffic, limited in amount and duration,* do not affect the capital investment at all, while their effect on operating expenses is as if half of them varied in proportion to traffic and half remained constant."[4] Clark reached the further conclusion that this constancy of costs obtains with regard to "month-to-month fluctuations, but for no other type of movement."[5]

The purpose here is not so much to show that the earlier pronouncements regarding the constant character of railroad costs must be modified in the case of longer range fluctuations in traffic volume than month-to-month, but, more particularly, to consider the *relative* fluctuations of the four main divisions of expense—namely, Maintenance of Way, Maintenance of Equipment, Transportation, and General Expenses—and to suggest possible causes for the variations noted. In answer to the contention that "true costs," rather than money actually spent, must be considered in a comparison of this sort, it may be suggested that the two tend to coincide when a period of sufficient length is taken."[6]

Accordingly, an examination, will be made of these four divisions of expense covering the period 1922 to 1938, inclusive. This interval includes a period of substantially normal business, from 1922 to 1929, when fluctuations in the volume of traffic were only such as must be expected in the normal course of events; and a period of violent change, characteristic of the crisis phase of the business cycle. These periods give an opportunity to compare the relative fluctuations in the different expense items under both normal and abnormal conditions, so that conclusions can be achieved in the light of both sets of conditions. General data are available over a much longer span of years; but the present analysis was restricted to the interval indicated in order to secure a background which would be free from the disrupting influence of the World War and the crisis which immediately followed.

[2] *Out-of-Pocket Cost as a Factor in Determining Freight Rates,* p. 2.

[3] *Ibid.,* p. 14. *Cf.* also *Quart. Jour. of Econ.,* vol. xxi, no. 2, p. 283.

[4] J. M. Clark, *Economics of Overhead Costs,* p. 259. Italics the author's.

[5] *Ibid.,* p. 274.

[6] By "true costs" is meant what would have to be expended, on the average, in the long run, thereby taking into account temporary deferments. However, the word "actual" appears in the pronouncements to which exception has been taken.

In Table I below are given, for the Class I railroads of the country, the volume of traffic handled,[7] and the expenses incurred under the four divisions indicated above, from 1922 to 1938, inclusive. In Table II these figures have been reduced to relatives, based on the arithmetic mean of each division of expense.[8] These relatives have been plotted on Chart I. The volume of business handled by the railroads rose sharply from 1922 to 1923. There was a slight recession in 1924, after which there was a

TABLE I
SELECTED OPERATING EXPENSES AND TRAFFIC VOLUME, CLASS I RAILROADS, 1922–1938

Year	Volume of traffic (Traffic units)[1]	Maintenance of equipment and stores	Maintenance of way and structures	Conducting transportation	General expenses
	(000 omitted)				
1922	374,755,310	$1,252,517	$728,664	$2,149,764	$156,705
1923	450,683,823	1,465,156	813,689	2,321,283	162,057
1924	424,506,198	1,260,020	792,678	2,151,979	167,819
1925	449,764,484	1,259,835	816,443	2,138,310	175,529
1926	479,224,012	1,283,091	866,819	2,181,517	184,390
1927	462,376,668	1,219,052	868,581	2,136,987	191,081
1928	464,516,527	1,166,942	837,906	2,069,927	188,191
1929	478,395,696	1,202,912	855,355	2,079,954	193,887
1930	410,264,413	1,019,265	705,471	1,848,184	191,237
1931	331,119,300	816,953	530,613	1,543,744	181,524
1932	250,948,053	618,941	351,179	1,157,774	155,569
1933	265,653,690	598,709	322,286	1,077,982	143,841
1934	286,203,816	637,906	365,300	1,164,066	161,525
1935	300,512,504	681,887	393,967	1,253,113	142,974
1936	361,666,835	783,000	454,810	1,401,187	157,281
1937	385,275,683	826,709	495,594	1,504,642	145,345
1938	311,713,089	676,507	420,147	1,356,816	127,517

Data from Interstate Commerce Commission, Statistics of Railways.
[1] A traffic unit is composed of a ton-mile plus a passenger-mile.

reasonably steady increase until the advent of the depression in 1929, with a minor sag in 1927. There were variations from this picture in the case of individual railroads; but this was the general course of events for the Class I railroads as a whole, as presented by the statistics of the Interstate Commerce Commission.

If the variations in the several divisions of expenditures chosen are examined for this period, some interesting relationships are disclosed. Con-

[7] The volume of traffic is expressed in traffic units, composed of one ton-mile plus one passenger-mile.
[8] If the relatives are based on the year 1922, instead of the mean, the deviations noted become more pronounced.

sidering first the relation between Maintenance of Way and Transportation (C.T.) expenditures, if it were true, without the qualifications imposed by Professor Clark, that Maintenance of Way expenses are composed largely of costs which are constant, whereas the Conduct of Transportation comprises costs incurred directly in the handling of the traffic and therefore reflecting changes in the amount of business, Maintenance of Way expenditures should fluctuate, if at all, less vigorously, and more inde-

TABLE II
RELATIVE VARIATIONS IN SELECTED OPERATING EXPENSES AND TRAFFIC VOLUME, CLASS I RAILROADS

Year	Volume of traffic	Maintenance of equipment and stores	Maintenance of way and and structures	Conducting transportation expenses	General expenses
1922	98.3%	127.9%	116.5%	123.8%	94.4%
1923	118.2	149.5	130.2	133.6	97.5
1924	111.2	128.7	126.9	123.8	100.9
1925	117.7	128.6	130.8	123.2	105.5
1926	125.6	131.0	138.8	125.4	110.0
1927	121.1	124.4	139.1	123.0	114.9
1928	121.5	119.0	134.3	119.2	113.2
1929	125.2	122.9	137.0	119.6	116.5
1930	107.7	104.0	113.0	106.3	115.0
1931	86.8	83.3	85.1	88.8	109.2
1932	65.8	63.1	56.2	66.6	93.6
1933	69.6	61.1	51.7	62.1	86.6
1934	75.1	65.1	58.5	67.1	97.2
1935	78.8	69.6	63.1	72.2	86.0
1936	94.8	79.9	72.8	80.6	94.6
1937	101.0	84.4	79.6	86.6	87.4
1938	81.7	69.0	67.3	78.1	76.7

NOTE: Relatives are based on the arithmetic mean of the respective expense items for the entire period. Computations have been made by slide rule.

pendently of fluctuations in traffic volume, than do C.T. expenses. An examination of the chart, however, shows that the opposite is actually the case. C. T. expenses fluctuate less than either traffic volume or Maintenance of Way expenses; and, while C.T. expenses show some relation to the general pattern of fluctuations in business handled, variations in the volume of traffic are followed much more closely by Maintenance of Way expenses. For the whole period under consideration, fluctuations of C.T. expenses cover a range of 63.3 per cent, whereas fluctuations in Maintenance of Way expenses cover a range of 87.4 per cent. It may be argued that this comparison is not good because it includes the period of the depression, which is characterized by abnormal relationships, whereas the statements regarding the relative constancy of the various cost items assume normal conditions. If, however, attention is confined to the period from

1922 to 1929 inclusive, the results are substantially the same. Between 1922 and 1929 the volume of traffic increased from 374,755,310,000 traffic units to 478,395,696,000 units, or by 27.7 per cent (there were intermediate fluctuations which will be considered presently). During this same period Maintenance of Way expenses increased from $728,664,000 to $855,355,000, or by 17.4 per cent; but C.T. expenses declined over these years from $2,149,764,000 to $2,079,954,000, or by 3.2 per cent, thus indicating not only a divergence in trend from that of business handled, but also a much smaller amplitude of fluctuation than either the volume of traffic or Maintenance of Way expenses.

Maintenance of Equipment expenditures follow closely the pattern of C.T. expenses for the period as a whole. There was a sharp increase from 1922 to 1923, with the increase in business, after which there was a steady decline (except for a slight rise in 1926 with the business bulge of that year), which was greatly accentuated with the advent of the depression, reaching a bottom in 1933.

If attention is directed next to General Expenses, which have been regularly regarded as the most nearly constant of any group of operating expenses, and almost totally independent of traffic volume, it is seen that they increased over this period (1922 to 1929) from $156,705,000 to $193,887,000, or by 23.7 per cent, corresponding more closely to the net change in business handled than any other group of expenses!

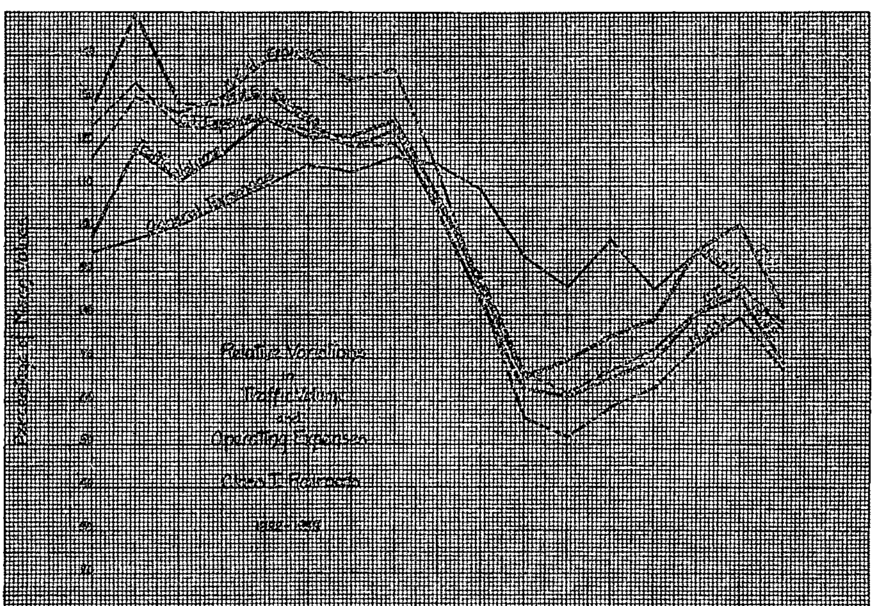

CHART I

With respect to the intermediate (year-to-year) fluctuations, the correspondence between General Expenses and traffic volume is not as close as for the period as a whole; but it is, even so, much closer than the correspondence between C.T. expenses and traffic volume for the period from 1922 to 1929. The increase of approximately 20 per cent in traffic handled between 1922 and 1923 was accompanied by increases of three per cent in General Expenses, 10 per cent in C.T. expenses, 14 per cent in Maintenance of Way expenses, and 21 per cent in Maintenance of Equipment expenses. Here Maintenance of Equipment leads in correspondence to traffic, and General Expenses show least variation, with C.T. expenses next. Between 1923 and 1924 there was a drop in business of seven per cent. All the main divisions of expenses showed a corresponding reversal of trend, except General Expenses, which continued to increase. Equipment expenditures showed a more than proportionate drop, amounting to nearly 20 per cent; while Maintenance of Way expenses showed the least decline, of approximately three per cent. C.T. expenses more closely paralleled the fluctuations in business. During the next two years, however, when traffic increased 14 per cent, C.T. expenses and Equipment expenses each showed a net increase of only about two per cent, whereas Maintenance of Way expenses increased nearly 12 per cent, and General Expenses increased by about the same amount, a much wider fluctuation, and a much closer agreement with the change in traffic volume. The following year General Expenses moved contrary to the change in volume of business; Maintenance of Way expenses were practically constant; and Equipment expenses showed the closest approximation to the change in traffic, with C.T. expenses next. Between 1927 and 1928, although business showed a slight increase, all groups of expenses declined, the maximum relative decline occurring in Equipment expenditures, with Way expenses next. From 1928 to 1929 traffic increased nearly four per cent, General Expenses increased in the same proportion, Maintenance of Equipment also; Maintenance of Way increased between two and three per cent, and C.T. expenses approximately 0.4 per cent.

These yearly variations in expenses, if not in direct contradiction, certainly offer little support to the usual pronouncements with regard to relative constancy. The rise in General Expenses over the period from 1922 to 1929 inclusive must be attributed, in part at least, to the increase in the cost of maintaining the highly centralized control, which was developed on the railroads in those years, with an increasing volume of business. There was also an increase in wage rates in this branch of the service with the spread of employee organization. This improved, centralized control in turn accounts in part for the downward trend in C.T. expenses which has been pointed out above. C.T. expenses constitute the largest division of expenditures in actual dollars disbursed, and, therefore, offer a field of prime

importance in which the management can work for improved economy.

With the advent of the depression in 1929 the volume of traffic fell continuously until it reached bottom in 1932. There followed a reasonably steady increase over the next three years, which was augmented in 1936 and 1937; so that by the end of the latter year the volume of traffic was slightly above the level of 1922, having risen from a low point of 66 per cent of the mean for the whole period. All divisions of expenses were severely curtailed as the depression developed; but certain groups have evidenced a change in their relation to variations in traffic volume when compared to the pre-depression period. For example, General Expenses have passed through a continuous series of fluctuations not characteristic of this item before the depression, and not in keeping with the trend in business. This is due to the operations of the federal pension system. Pensions constitute by far the largest single item in this group of expenses; and they have varied from approximately 33 million dollars in 1933 to more than 50 million dollars in 1934, to approximately 28 million in 1935, to over 37 million in 1936, to 17 million in 1937. Maintenance expenses of both Way and Equipment dropped from 1929 to 1932 in close conformity with the decline in business. But, whereas business turned upward in 1933, Maintenance expenditures continued to decline; and, while they have increased steadily since 1933, the rate of increase has been less than the rate of increase in traffic; so that in 1937, while the volume of business was slightly above the level of 1922, Way expenses were only 68.1 per cent of the 1922 figure, and only 80 per cent of the mean for the period. The situation is substantially the same with regard to Maintenance of Equipment expenditures, the level in 1937 being 66 per cent of the figure for 1922, and 84 per cent of the mean. C.T. expenses, while showing similar tendencies in the main, never dropped as low as the other two expense items, and in 1937 were 70 per cent of the 1922 level, and 87 per cent of the mean for the whole period, again exhibiting variations, relative to the other items, contrary to what would be expected on the basis of the general pronouncements, applying to monthly fluctuations. In 1938 business fell off approximately 20 per cent. All divisions of expense likewise declined, though in less proportion. The drop in Maintenance expenditures was greater, however, than for either C.T. or General Expenses.

This failure of the several cost items to conform to the accepted pattern in the matter of relative variations, when traced over a reasonably long period of time, is due to the effect of factors which do not become operative in the case of short-run fluctuations in traffic volume. The assumption of specific standards has been referred to above. Standards, however, are not specific or fixed over any extended period. Neither are the methods employed in performing the various operations which go into the production of rail transport. In considering the relative constancy of Maintenance

of Way expenses, for example, it is not pretended that there has not been some maintenance deferred during the period since 1929. As Locklin points out, this practice may give the appearance of variations which are not real.[9] What is claimed here is that the amount of maintenance which has been deferred cannot be measured from some standard presumed on the basis of expenditures made in 1929. Expenditures which may have been necessary then may not be necessary now because of changes which have taken place in the operations involved, and in the equipment to be maintained. The demand for labor in maintenance operations may be less today than it was in 1929, per mile of track or per unit of traffic; but this does not in itself signify that maintenance is being deferred, or that standards have been lowered.[10]

The question raised here is: how much of the variation in maintenance costs can properly be considered to result from variations in the volume of business done? The statement has commonly been made that cross-ties weather away rather than wear out with the traffic passing over them. This statement was originally based on conditions which obtained at the turn of the century. This is true today only after several items have been taken into account. Considerable sums are expended every year by the railroads for the treatment of ties by which their "weather" life has been greatly extended, thus enabling the use in some cases of softer woods than formerly. But the capacity and weight of rolling stock has increased with the increase in volume of traffic. Therefore, considerable additional sums are spent by the railroads every year for tie-plates. So, ties may not wear out with traffic today because of these additional expenditures to protect them. Not only are tie-plates in common use at present, but they have been successively enlarged to keep pace with the increasing wheel loads and the impact of higher speeds. Thus traffic changes have induced changes in Way expenses. As Clark points out, we may grant that certain deterioration is due wholly to weather; but it must also be granted that "*the amount of plant exposed to the weather* varies with the traffic.[11]

An additional point to which it is desired to call attention here has to do with the statement made earlier, that the effect of variations in traffic volume on costs may be either direct or indirect. It is true that "embankments are washed by rains, ditches become filled, rails and rail fastenings rust with exposure to the weather"[12] which is in no direct way connected with the volume of traffic moving over the road. However, there are usually different means available for maintaining the properties against these

[9] D. Philip Locklin, *Economics of Transportation*, p. 139.

[10] *Cf. Jour. of Pol. Econ.*, vol. xlvi, no. 5, p. 714. Increases in the weight of rail alone have resulted in considerable reductions in maintenance costs without any lowering of standards; so also has the mechanization of many operations.

[11] J. M. Clark, *op. cit.*, p. 230. Italics are the author's.

[12] Locklin, *op. cit.*, p. 138.

ravages of the elements; and the choice offered will be made in the light of the funds at hand, which *are* functionally related to the amount of business done. Embankments are washed by rains, and ditches filled irrespective of traffic movements; but the type of culvert or retaining wall constructed, or drainage installed, will depend upon the income provided for these purposes. The expenses involved in the maintenance of some of our big passenger stations and grounds constitute in some measure "putting on the dog" to attract traffic. The question of adequacy here may easily become a matter of available funds; and the available funds vary with the volume of traffic.

The distinction between "true costs" and dollars actually expended loses force because it is not fixed standards which determine the amounts properly spent, but rather the funds available which determine the standards that can be set up from time to time. The problem is further complicated by the impact of technological change, as already indicated. The fact remains that the relative constancy of the several divisions of cost, as usually stated, is not borne out by the data for any appreciable period of time.

The problem is essentially dynamic; and the method of analysis must recognize this fact if the results are to conform to reality. That there are factors, independent of variations in the volume of traffic, which affect railroad costs cannot be denied. But the conclusion seems warranted that the general pronouncements with regard to the *relative constancy* of the several divisions of operating costs can be accepted as reasonably accurate only within definite limits. When considered over any period longer than a month, the variable element in all operating costs stands out as the dominant characteristic. Nor do the main groups of costs stand to each other in any fixed relationship, except as they all tend to conform in some degree to the pattern set by the volume of business handled.

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THE USE OF ECONOMIC PRINCIPLES IN THE TEACHING OF APPLIED SUBJECTS

Paper presented at a Round Table Conference of the American Economic Association, December 27, 1939.

Subsequent to Professor Hamilton's vigorous attack in 1919, many economists have supported his charge that economic theory has failed as a "unifying agent" for the "sprawling frontiers" of economics. A study of departmental course offerings and the textbooks widely used in upper-division classes gives considerable support to this criticism. Such courses have lost contact with their major objective—the application of economic theory—and have become adjuncts of the school of commerce rather than the social science of economics. Public Finance and Labor Problems are unfortunate cases in point. Courses and textbooks in specialized fields must go beyond mere descriptive, technical material and build upon the foundation of economic principles used as a kit of tools designed for the study of the operation of the economy as a whole. The lack of unity charge should be addressed to the specialist in applied fields rather than to economic theory. Any study of a phase of the operation of an economy as a whole can be illuminated by the use of economic principles, but systematic theory can never unify technical, structural, administrative studies of business—a rôle for which it was never intended.

Has Economic Theory Lost Its Rôle of a Unifying Agent?

In 1919, Professor Walton H. Hamilton wrote:

> The task of a general body of theory in any subject is to give unity to its investigation. At present economics is badly in need of such a unifying agent. Its sprawling frontiers reach from value theory across money, taxation, and transportation to salesmanship, insurance and advertising. Each of these subjects has its own personnel. Those who seek truth in these remote fields of inquiry know little and care less for value theory. . . . As a result economics today tends to break up into a large number of overlapping but unrelated inquiries and to lose the unity which in times past has been its source of strength.[1]

Professor Wesley C. Mitchell voiced the same lament in 1925 asserting as an example that economic theory "plays a small rôle in our work as specialists in public finance. . . ."[2] Professor Willard E. Atkins continued the lament in 1935 stating:

> Part of the unrest has been indicated by the drift of teachers into business fields and into schools of commerce. From outside positions they have thrown back at the traditional economists the charge that their teachings are unreal.[3]

I quite agree with these writers that economic theory should be a unifying agent which specialists in the fields located on the periphery of economics could ignore only at the risk of placing in peril their reputation as specialists. The general body of economic theory, or economic

[1] Walton H. Hamilton, "The Institutional Approach to Economic Theory," *Am. Econ. Rev. Suppl.,* March, 1919, p. 312.

[2] Wesley C. Mitchell, "Quantitative Analysis in Economic Theory," *Am. Econ. Rev.,* March, 1925, p. 6.

[3] Willard E. Atkins in discussion: "Institutional Economics," *Am. Econ. Rev., Suppl.,* March, 1936, p. 251.

principles, should supply necessary analytical tools for specialized fields of inquiry or it must accept meekly criticisms that it is an exercise in logic with what Barbara Wootton has called an apple-pie world as its only subject-matter.[4] Economists must be prepared to meet the challenge both as experts in special fields of inquiry and as professors in the classroom. As students of economic science we should be interested in such a subject as *insurance,* not as a technique or art of business, but as an aspect of the operation of the economy as a whole. An economist, as distinct from a business expert, should be interested in *marketing* not as a business technique for the distribution of goods, but as an integral part of the economic process. The teaching of courses in the various fields of applied economics in American colleges has, over a long period of years, gradually become so dominated by the growth of business education that the connection between economic theory and the problems usually discussed in association with these subjects has largely atrophied.

Departmental Offerings in "Economics"

An intelligent layman who examined the curriculum offerings of the usual department of economics, and as a follow-up explored the contents of the most widely used textbooks in each specific course listed, would certainly reach the conclusion that the criticisms of Hamilton, Mitchell, and Atkins were thoroughly justified, if teaching practices are an index of the content and methodology encountered on the "frontiers of economics." The customary catalogue statement, appended to the course descriptions of Public Finance, Labor Problems, Transportation, Monopolies and Trusts, Merchandising, Public Utilities, and the like, "Prerequisite—Principles of Economics," is usually a combination of academic ostentation and academic deceit. With a very slight tempering of phraseology courses such as International Trade and Commercial Policies, and Money and Banking, can be included in the list. To label these courses "overlapping unrelated inquiries in which economic principles play an unimportant rôle" is a legitimate characterization.

After completing his first course in principles, the average undergraduate majoring in economics leaves a field of inquiry that he never comes in contact with again in any penetrating form up to the day he graduates. In some institutions, and for some students, senior work in Economic Theory and the History of Economic Thought may bring him back once more to his half forgotten freshman or sophomore year, but more often he must enter the graduate school for a re-introduction to economic science. He never quite discovers an integration of his work in theory with that of specialized fields. The usual course offerings seem to be the unhappy illegiti-

[4] Barbara Wootton, in *Lament for Economics,* 1938.

mate offspring of a casual union of economic science with business technique. Small wonder that keen critics have been unable to discern evidence of a legitimate union. To sandwich a condensed school of commerce between an introductory course in Principles of Economics and a senior course in Economic Theory most certainly does create problems, and the unfortunate persons forced to teach under such conditions are very likely to drift away from economic principles to the arts and techniques of business. Stated concisely, my thesis in this paper runs something as follows: The customary courses in the applied economic fields have lost contact with one of their primary objectives—the application of economic principles—and have gradually become adjuncts of commerce rather than the social science of economics. Reflect for a moment upon two concrete examples in support of this thesis.

Public Finance as an Example

The evolution of that important subject, Public Finance, is, in my opinion, a modern tragedy in economics. From an origin as an integral division of Political Economy in Adam Smith and John Stuart Mill, it has evolved into a modern study in which as keen a mind as that of Professor Mitchell finds but an insignificant rôle for economic theory. Is it not possible that the rather widespread dissatisfaction with Public Finance textbooks is rooted in the failure of the authors to attack the subject with economic principles as sharp analytical tools? Was Professor Mitchell pointing out limitations of economic theory or the limitation of the specialist in public finance? Is the weakness of economic theory as a kit of tools inherent in that body of theory or is it a consequence of the development of public finance at the hands of its specialist? I can think of no field of inquiry in which economic theory has more to contribute than in the manifold aspects of the raising and expending of public revenues. In Marshall's *Principles of Economics,* the field of taxation is used for purposes of exposition more than twenty times, in many cases the analysis running for several pages. On page 413 he wrote: "There is scarcely any economic principle which cannot be aptly illustrated by a discussion of the shifting of the effects of some tax."[5] Try to reverse this statement by locating more than twenty penetrating applications of economic principles in any of the standard textbooks on public finance. The specialist in public finance fills his volume with extended presentations of the details of tax administration, the classification of tax systems, jurisdictional controversies, constitutional limitations, forms of public borrowing, budgetary procedure, and the like. It is necessary to peruse the table of contents and the index with great diligence to locate the few scattered paragraphs or pages concerned with vital economic problems.

[5] Alfred Marshall, *Principles of Economics,* 8th ed. (1925), p. 413.

Yet the subject fairly bristles with notable problems. Consider a few random examples: (1) the effect of specific taxes, especially highly progressive taxes, upon capital accumulation; (2) the consequences of public borrowing in competition with private borrowing upon the economy as a whole; (3) the economic importance of different elasticities of demand and conditions of costs with reference to a sales tax; (4) the different effects of different specific taxes and forms of public borrowing upon the distribution of wealth and the direction of production; (5) a comparison of the economic effects of a pay-as-you-go tax plan with a plan of public borrowing; (6) the consequences of the use of taxation as a means of redistributing the national income upon the functional controls of a capitalistic economy; and so on.

The possibilities for a text that will earn the label "The Economics of Public Finance" are most attractive. But what do we find? One of the recent texts gives only two pages of discussion of the effects of public borrowing upon the distribution of wealth and income out of over one hundred pages devoted to public borrowing as a whole. The same book gives only nine pages on the economic effects of public expenditures (most of which are descriptive rather than analytical) and one page on the effects of public expenditures on the redistribution of the national income, out of approximately one hundred and fifty pages on public expenditures. In a book of over six hundred pages, only twenty-one deal with the problem of shifting and incidence of taxes. I do not mean to be harsh in criticism of this one book; the same general deficiencies are encountered when competing volumes are examined. Also, if one approves the present typical college course in Public Finance as an offering in "economics," he will find the book I have used as an example rather well done. But if an economist desires to teach a course in which the field of Public Finance is examined with economic principles as a unifying agent, he must build his syllabus from the ground up, drawing from the writings of general economists and the praiseworthy special studies of such organizations as the Twentieth Century Fund. It will take time to evolve an Economics of Public Finance that will not be open to Professor Mitchell's criticism, but it can and should be done.

Labor Problems as an Example

A second applied field that has sadly neglected the use of economic principles as tools of analysis is that of labor problems. In the June, 1939, issue of the *American Economic Review* an extremely interesting communication by Professor Eleanor H. Grady outlines a unique method for teaching labor problems by the use of current news items.[6] As a device for

[6] Eleanor H. Grady, "Teaching Labor Problems by the Case Method." *Am. Econ. Rev.*, June, 1939, pp. 345-347. A personal note from Professor Grady informs me that I have

arousing interest and developing a critical attitude in the student, that brief communication is worthy of your sympathetic study. I was surprised to notice, however, that no reference whatever was made to the tying of economic principles to this interesting course in labor. Apparently this omission was not accidental, for at one place Professor Grady asserts: "Labor Problems may be given at almost any point in the college curriculum."

I sharply challenge such a statement. A descriptive course in labor institutions and the manifold aspects of industrial conflict *can* be given at any point, but a course that faces squarely the basic issues of labor problems must be built upon a firm foundation of economic theory. Study of the general problem of unemployment including employer, governmental, and trade-union methods for its reduction, must begin with a firm grasp of Say's law in its present-day dress. Witness the heated discussion of this economic principle growing out of Professor Keynes's *magnum opus*. No course in Labor Problems has earned a right to be listed as an offering in economics that discusses the Wage and Hour law without tracing its consequences in terms of the best wage and general distribution theory. Can such a law raise the general wage level? Why or why not? If it *will* raise that level, then what are the effects to be expected on capital accumulation, profits of enterprise, land utilization? If it will not raise that general level, but perhaps will aid one group of workers at the expense of other groups of workers (or at the expense of labor as a whole in the rôle of consumers), a different set of economic consequences opens before the student. The study of the struggle between the A. F. of L. and the C. I. O. introduces the problem of the elimination of skills with the progress of technology. What does this mean in terms of non-competing groups, wage structure, the distribution of the national dividend? The use of arbitration in the settlement of industrial disputes usually results in a compromise solution. What, if any, are the fixed consequences in terms of wage theory of a practice of fixing wages by compromise? The naïve handling of the problem of the incidence of the new Social Security taxes must give competent theorists a feeling of hopeless despair.

If we examine the widely used textbooks on Labor Problems do we find the bright light of scholarship directed upon these vital and interesting issues? No, we are confronted with chapter after chapter of descriptive material on the classification of trade unions, history of the labor move-

misunderstood her meaning. It was her intention to emphasize new elements of her approach rather than describe her course in labor as a whole. However, since she stated clearly that labor problems could be taught at any point in the college curriculum, and at no point in her communication mentions the use of theoretical economics, I feel my interpretation is justified.

ment, structural aspects of unionism, functional aspects of unionism, experiments in industrial democracy, and similar topics. When the authors find themselves unavoidably faced with basic economic issues a few paragraphs or pages of the most general sort are inserted with almost no definite application to the real problem at hand. Surely there is an applied field that can be labeled "The Economics of Labor." Am I going too far in stating that it is almost a virgin field, crying for exploration and synthesis? The only attempt in this direction in textbook form with which I am familiar is found in Part III of Professor Pigou's *Economics of Welfare*.

Sufficient has been said to make my thesis clear. There is little to be gained by additional examples from such fields as Government and Business, Marketing, and Transportation. All instructors in economics have struggled with these courses in their experience as teachers of economics. Is the failure of economic theory to unify the applied fields an inevitable result of the limitations of that body of theory, or is the answer found in the surrender of the specialist to the popular clamor for, and growth of, schools of business and commerce? Why not strike out on a new road along which the kit of tools known as economic theory will be utilized in the study of the operation of the economy as a whole? It will take time, but the reward will be well worth the time and energy consumed upon the task. Upper division work in economic problems can become integral parts of a broad survey of the modern economy as a going concern. Professional economists, and students in the process of training, must of course know the facts of everyday economic life. They must be equipped with thorough knowledge of economic institutions and techniques. But as students of economics their task is not completed until this mass of material has been analyzed, by the direct application of economic principles.

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TREATMENT OF CONTROVERSIAL QUESTIONS IN THE TEACHING OF POLITICAL ECONOMY

Paper presented at a Round Table Conference of the American Economic Association, December 27, 1939.

The teacher of political economy cannot be "neutral" in controversial questions, "giving all sides" and letting it go at that. Such questions are not isolated, but fit into a pattern of development which will be different for different teachers. The teacher is not so much an advocate of views as he is a reporter on observations. The honest teacher makes himself the ally of history as he understands it; believing that after all economics is an art rather than a science, he necessarily makes room for deliberate social purpose. The usefulness of quantitative methods should not blind us to the essentially qualitative character of the subject. Every great teacher of political economy had a thesis. Those who refused to take a position added little to thought or action, and are forgotten. "Indoctrination" does not imply neglect to explore and to refute. It means simply scrupulous inspection plus earnest recommendation.

In political economy, over a period, principle derives from practice, and not the other way round. Sanction follows social convenience. Evolution in doing compels evolution in doctrine. This does not mean that local and temporary and partisan interest can immediately alter received rules. And where there is a wider and more permanent change of advantage, there is still the celebrated lag which makes for gradual warping rather than sudden abandonment of old theorems. It is commonplace that a minority equipped with control of the social means of production may for long keep law and morals on its side. But in the economist's beloved "long run" we learn by living, and do not live by learning.

This is lesson number 1 in the teaching of political economy. Unless one recognizes that in economic life there is no absolute, and that trends in thought follow trends in performance, he is not attempting to study social behavior but is trying to define a theology. Writings reduced to something like system the elaborate opportunism which went by the name of mercantilism. After these coercive public policies had been eaten into by private initiative, the *laissez faire* philosophy was seized upon eagerly because it justified what was already familiar conduct. And now that individualist enterprise has grown out of all anticipated proportions, and thus taken on, inevitably, the collectivist character, the propriety of public control is again urged. This is historical development, with the unexpected becoming, after a time, orthodox.

There have been variants, of course, within the larger cycle. Consider the dissent from classical doctrine inspired by American geographical and economic conditions at the beginning of the last century. Here was a country not of decreasing but of increasing returns, in which accessions to population meant not resort to poorer natural resources but to richer, with the consequence of a larger product for each worker. Instead of growing economic stringency, as in old countries, there was progressive liberation. In place of attention to the division of labor, association of labor was the need. The

intervention of government, as in enactment of protective tariffs, was not regarded as meddlesome limitations of the individual, but was beneficial employment of united power. America was economically buoyant and not, like England, apprehensive. Before the eyes of the American was always potential surplus, not theatened reduction to mere subsistence. And so the despairing Malthusian principle of population and the forebodings of Ricardian rent were refuted by dwellers in the American Garden of Eden who had beheld the tree of life and not yet tasted its forbidden fruit. Contrast the Careys with the Mills. The former sped gaily up the rainbow, while the latter pair, not so clothed in light, tried to chart a prudent path ere dusk turned to darkness. Alexander Hamilton helped teach Friedrich List that the nation, as a political and economic entity, stood between the individual and the cosmos; it could serve its turn in promoting wealth and well-being, and so accepted dogma must be adjourned for the nonce.

Thus, in its historical sweep, all economic theory is grandly inductive—a million particulars gathered up, somewhat belatedly, into a few generalizations. Promptings to volunteer action, be they numerous enough and long enough continued, are after a time tolerated, are then expected, and end by becoming dominant. Erstwhile dissenters, when theory has come to their rescue, find themselves comfortable conformists, only to pass later into dictatorship which carries in itself the seeds of its own destruction.

If, then, there is constant change of practice, with validating doctrine at an interval behind, the teacher of economic principles has a permanent task of interpretation. How explain the new adventure in the light of the old axiom? Which experiments are evanescent, and which are destined to remake the rules? Which are light airs that merely ripple and feather the sea, and which is the wind that will bring the wave?

We often speak of "a controversial question" as though it were isolated in time, a thing to be decided on its separate merits. It is in this view that the teacher is enjoined to "give both sides," to "preserve an objective attitude." Doubtless there are such economic asteroids, as it were, floating in a universe, and not magnetically joined, so far as we can determine, to any larger mass. These offer the teacher an exercise in studied neutrality. But matters of larger moment, where strong beliefs are prompted by important interests, are not so disconnected. To the teacher aware of his subject, these belong in a sequence which he thinks he discerns, they fit into a pattern, they have their places in generalization. How may they be divorced from the train of events, the line of development, to which they seem to belong? It is a shallow and immature perception which regards relief legislation, gold standard, and anti-trust acts, for instance, as objects of scrutiny for their own sakes merely. A great teacher once told me how his self-esteem was destroyed. He had used three months in laying before a class the causes and course of the French Revolution. When he had settled back with some

satisfaction, the student who sat nearest his desk asked, "Well, Professor, was the French Revolution right or wrong?"

Any teacher of political economy likely to give his students anything believes he has observed certain tendencies, and tries to project these trends. In exposition he will not be guilty of sins of conscious omission. He will not want to put blinders on his students. He will treasure detail, explore doubts, probe contradictions, beg for refutation. But honesty will compel him to assign causes and seek for consequences. He has a theme, a rhythm runs in his head, he cannot be satisfied until there is a completeness, until the circle, to the best of his understanding, is closed. And in accordance with this intellectual method he will interpret the particular issue.

The notion that the teacher, especially of the elementary class, may be neutral is absurd on the face of it. Is the blind to lead the blind? The simplest fact, so called, can scarcely be conveyed without indicating the impulse behind it and the force which follows from it. Insistence that the teacher should never indoctrinate, should be an intellectual eunuch, has gained from emphasis upon the quantitative method in economics and other of the social sciences. The ambition to make economics an exact science prompts the exclusion of opinion. Qualitative judgments are to be eschewed, the relative is to be reduced to the precise. A census, a mere enumeration faithfully taken is supposed to disclose a result unsuspected, much in the way that obedient rubbing of the jar brought the genie. The symbols of a formula become the servants of truth, and a graph has authority in every peak and trough. Surmise gives way to certainty; "perhaps" and "probably" sink like the waning moon, while the blessed sun of "proof" rises in the opposite quarter of the heavens.

My own brief seduction to this view was speeded by my inability to understand the mathematics employed by the disciplinarians to whom I listened. I abandoned the exactitude which was enjoined and was ready, in an act of faith, to declare them miracle men. Disillusionment was swift as conversion, and doubtless appealed to firmer intellects than mine. A prominent and patently honest scholar who had been a leader in forming the Econometric Society counseled those who subscribed for his investment service to buy more common stock on the very eve of the crash of 1929. I should have allowed for accident. We are frail vessels, imperfect instruments of great purposes. With returning hope I listened to this gentleman's explanation to the subsequent meeting of the Association of how he came to be exactly mistaken. But the slide rule, which has been the emblem of the old faith, became limp, its graduations blurred beyond recognition. The rod of Aaron was flung down, and wriggled like a snake.

I have not time, if I had knowledge, to review the long discussion as to whether political economy is a science or an art. Nor can I expect you to be very interested in my unsupported notion that it is the latter, that design

for the future may be joined to derivation from the past. Economic determinism, which is the loose formula of the collectivist, means that prior conduct has a bearing upon subsequent development, but does not forget that what we do now helps to shape the compulsions under which we shall some day rest. The wish need not be impotent in economic affairs. Exhortation may be quite as powerful as the savings of large-scale production. There is the element of conscious control. Moral force may have its place beside magnitudes susceptible of more precise statement. Consider how one field after another, supposed to exemplify the action and interaction of almost mechanical impulses, has been invaded by extra-economic designs, so that the automatic has given way to the induced result. For example foreign exchange, sometimes pictured as an area in which insensate economic electrons collided, has been disarranged, even destroyed, by the passions of peoples. The value of gold, so universal as to be acknowledged almost intrinsic, has been pretty much abolished in the monetary sphere. It hardly forms any more even a standard of reference. We wonder whether the only values are not political rather than economic. I am not forgetting the economic causes which have roused and egged on the hates of nations, but am only saying that we may not neglect, in trying to discern the economic future, what stands in the foreground of the present. The tracing of a line on a map may enlist more expenditure of wealth than the building of power dams or the construction of railways. The enduring of hunger for the sake of a shibboleth may seem more desirable than full bellies. Resuscitated pagan deities may preside over economic forces with a sway vastly superior to any accountant's calculation of profit and loss. When Lenin arrived at the Finland station in Petrograd in 1917, for all that he was a Marxist, more had come to Russia than exhaustion from the war, more than a reminder of the dogma of class conflict.

If we may allow, then, that economic development has been and is quite as much an art as it is a science, why not prepare practitioners? The physical result of mixing pigments will be the same when done in a vat in a paint factory, but what differences appear when the instrument is the brush of this painter or that! One gives us yellow ochre, another sunlight. One presents us with the degree of refraction of light which we call violet, while the more skillful records a luminous shadow.

Some say that we should not surrender to apparent imponderables by contenting ourselves with qualitative judgments about them, but should organize statistical attack. Where definition and curve and formula do not resolve doubts, then the teacher's rôle is neutrality. He must be a mirror which his students may turn this way and that to reflect from every angle. But the teacher cannot be a cipher in his own equations. He knows that what often pass for objective economic forces are truly the expressions of individual or, oftener, group interests. Much that is pictured as imponder-

able, fit to balk conclusion, is ponderable enough. It is perhaps the protest of a distant father who has received a garbled report of something the instructor said in class. Or an ancient rich trustee threatens to resign from the board if a man with such and such opinions is kept on the faculty. It is to be noted that students rarely call an instructor unfair. The outcry usually comes from persons who never heard the man teach for five minutes, and in this list may often be included officers of administration. Each of the great teachers of political economy had a thesis, and it had the most important social implications. Smith tried to demolish commercial restrictions and to invite freedom. Malthus assailed the optimists of his day. Mill is more distinguished for his doubts about the capitalist system than for his attachment to it. Marx and George and Veblen carried crusades. The mere expositors, the patient amenders are remembered only by writers on the history of economic thought. What should we think, today, of the man who, in the name of "objective teaching," would have stopped the mouth of Adam Smith? Or read the record of the questions put to Henry George at a meeting in London by economists so excellent as Alfred Marshall and Arnold Toynbee; the man with a mission was confronted by the merely circumspect, and his reach for a better society certainly helped his reasoning.

We can turn out plenty of teachers well enough acquainted with economic literature and able to give an orderly account to classes. But they are sterile, and wake nothing in their students, unless they see beneficial drifts in society and do what they can, in the classroom and out of it, to help these forward.

BROADUS MITCHELL

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Note on Some Chamberlinian Solutions

There is, I believe, a paradox involved in one of Professor Chamberlin's solutions of group equilibrium (E. H. Chamberlin: *The Theory of Monopolistic Competition,* pp. 92 and 93) and his solution of equilibrium with excess capacity given a small number of firms (*Monopolistic Competition,* pp. 104-105) and free entry of firms in the field.

In the case of group equilibrium of a large number of firms and a field into

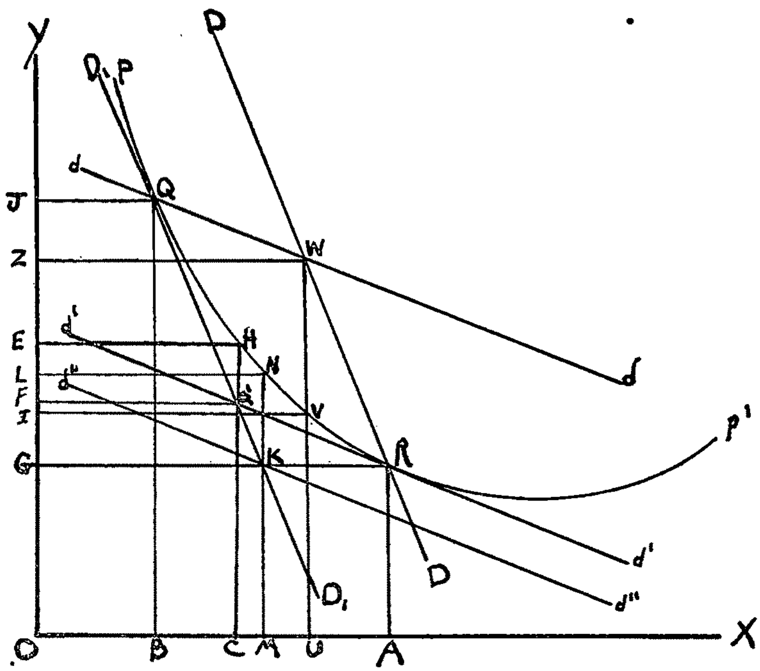

FIGURE 1

which entry is free (*Monopolistic Competition,* p. 92, Figure 15; see Figure I attached to this paper), Professor Chamberlin discusses the group solution when some price along *dd* to the right of *BQ* has, through the attraction of excess profits (*i.e.,* in this case any margin of price above *PP'*), drawn new firms into the industry forcing curve *DD* back to tangency with the cost curve, *PP'*. Professor Chamberlin points out that price cutting will take place due to the "possibility of increased profits, represented for any producer by the demand curve *dd''*. This will continue, say, until price *CQ'* and output *OC* is reached. In an attempt to get away from losses *FQ'HE* along the curve *d'd'* the cutting will continue to price *MK* at which point "losses are larger than ever." Now Professor Chamberlin concludes that "equilibrium can be achieved only by the elimination of firms." This is quite true but *only if it is granted that there is the implicit assumption of a difference in the hardihood of the firms involved* (*i.e.,* a differ-

ence in the ability of the firms to produce over a period of time at a loss). It is obvious that if this assumption is not granted *there can be no equilibrium in this case at all* because all firms would be driven out at once. Then they would be reorganized, or new firms would take their places, and the process would be repeated until either a difference in hardihood appeared or until people got disgusted with that industry and abandoned it altogether.

Now this is all very well and all very commonplace until one gets to Professor Chamberlin's discussion of equilibrium with excess capacity (pp. 104-105). Here Professor Chamberlin is discussing a small number of firms all of which act with regard to all their effects on one another. Then using Figure 15 (*Monopolistic Competition* p. 92) and with it, one assumes, all its assumptions except those clearly restated (*e.g.*, in this case there are small numbers acting with regard to their effects on one another), he points out that price, BQ (see Figure I attached) is "*perfectly stable.*" Now this is not necessarily so. It is true if all the firms are of equal hardihood, but such a change of assumptions has not been made explicit. If the firms are not of equal hardihood there may be constant oscillation of the following nature: There is a small group of competitors each acting with regard to his total effects on the others in the field. Price is set at UW; output is OU; and there are excess profits of $IVWZ$. New firms are attracted by these profits and enter the field driving DD to the position D_1D_1 tangent to PP' with price BQ. Now if some of the firms, due to a real or imaginary difference in hardihood, fancy that the total losses (*i.e.*, the product of $GKNQJ$ and the time it is present) involved in driving out the extra firms will be less than the total profits (*i.e.*, the product of $IVWQJ$ and the length of time these adjustments take) to be made before reëntry of new firms again drives DD to position D_1D_1 tangent to PP'—under these conditions—price will move from UW to BQ to MK to UW with firms continually coming in and going out, and the price BQ is absolutely unstable.

This does not go so far as to argue that *any* difference in hardihood, putative or actual, is sufficient unto itself to cause price BQ to be unstable. It does go so far as to argue that it is erroneous to state that "such an adjustment is perfectly stable" (*Monopolistic Competition* p. 105) unless the assumption is one of equivalent hardihood in all firms.

Under conditions of unequal hardihood price BQ may be stable, but it is by no means necessarily so. To keep the analysis on a strictly orthodox economic level one would have to argue that only an actual or putative surplus of profits over losses would be sufficient to guarantee instability. Many factors would determine this. The relation of variable to overhead costs, the speed with which firms could be driven out, and the celerity with which others would come in to replace them would be prominent among the factors to be considered. Comparative size of firms would tell one little in these matters; the rate of loss and of profit and the strength of banking connections would throw more light on the subject. The time interval is, of course, crucial. The method of capitalization of the firms has a strategic bearing on the point. Firms whose obligations were largely bonds and debentures could not produce for as long a time at a loss as those whose obligations in the form of common stocks are more easily ignored and capable of neglect for longer periods of time.

These considerations begin to leave strictly orthodox economic grounds almost at once and spread to institutional levels whereupon they become multiplied a thousandfold. Pure "cussedness" on the part of the head of one firm and his dislike of his present competitors may lead off the cutting. The field may become

unstable if one of the members thought that for a while losses involved in driving out competitors might be greater than the profits in the case and if at the same time he envisaged making the field so unattractive to new firms as to allow eventually a stable price at, say, *UW* or some point to the right of *BQ*. One might go on listing such factors indefinitely, but the strategic considerations of which these are all specific elaborations are: (1) the existence actually or putatively of a difference in hardihood and (2) the existence actually or putatively of some gain strictly economic or, more broadly, falling under a sociological head—some gain along the line of any value orientation—to be derived from the activity of forcing other firms from the field.

Of course it is not to be maintained that the case of oscillation herein suggested is to be found unalloyed in the empirically existential world. Such a statement would be reification pure and simple. Nevertheless it is suggested that this solution may be found as a contributing factor in many empirical situations and for that reason is on an equivalent theoretical level with the solutions set forth in Professor Chamberlin's book and stands or falls methodologically with them.

In summation, I believe that the paradox boils down to this: (1) the solution on pages 92-93 is wrong and that on pages 104-105 is right or vice versa, and the solution put forth here has been overlooked or (2) both solutions (pp. 92-93 and 104-105) are correct (*i.e.,* on pp. 93-94 the implicit assumption is a difference in hardihood, and on pp. 104-105 the implicit assumption is equal hardihood) in which case the failure to be explicit about crucial assumptions is, to say the least, confusing, and in addition the case here set forth, which like Professor Chamberlin's solutions may be of great partial import empirically, has again been missed.

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Welfare Economics a Misnomer

When applied to a body of economic thought, the term "welfare" rather obviously implies that the system of thought is designed to promote the welfare of society. In so far as Hobson's ideas are thus intended, the term "welfare economics" is correctly employed. But in so far as the label is applied to delineate a distinction between Hobson's system and other systems of economic thought, the term is a misnomer. For whether explicitly stated in the writings of its adherents, or whether implied by the activities of its adherents, each of several other schools of economic thought is designed to promote social welfare. That the school of free trade was designed to further social welfare becomes apparent in a statement made by Adam Smith: "By pursuing his own interest he [the individual] frequently promotes that of society more effectively than when he intends to promote it." Otherwise stated, this means that society best serves its own interests by turning the individual loose (laissez-faire). Socialist economists take the opposite view that society best serves its own interests by regulating the economic activities of individuals. Whether this regulation is achieved by state ownership of industry or by legislation is not pertinent here. Suffice it to say that socialist economists hold that collective planning is necessary to promote best the welfare of society. The arguments of either party to this debate need not concern us here. We merely note that the aim of both sides is the same—the advancement of social welfare.

When we examine price economics, we are faced with a more complicated

problem. Different students of price economics hold different views concerning the nature and significance of their study. In general, however, I think it safe to say that price economics is a study of economic activity as manifested in the system of market exchange. To clarify the discussion, we may define price economists as economists who base their opinions chiefly on studies of the operation of the market exchange system. This group may be divided roughly into three subgroups: those price economists who believe that the market exchange system best promotes the welfare of society; those price economists who feel that modifications of the market exchange system must be made to promote best the interests of society; those who study price economics for other reasons. It is perhaps safe to say that most price economists fall into one of the first two categories. Both groups obviously (almost by definition) are interested in promoting social welfare.

If Hobson's economic thought is not distinctive in its attempt to further social welfare, is there any distinguishing characteristic of Hobson's thought? The distinctive features of Hobson's thought seem to derive from the individuality of his orientation. Subjected to a diversity of influences in his formative student days, Hobson assumed a position which he has described as "heretical" but which may perhaps more accurately be described as "heretical eclecticism." For, sharply heretical though his critical writings are, his creative thought embodies ideas contained in the writings of other schools. The individuality of Hobson's approach has been aptly described by Harvey W. Peck who terms welfare economics "the expression of a personality who combines the characteristics of the theoretical man, the social man, and the artistic man."

Trained in the Marshall school of rigid economic thought, Hobson was a capable theorist. But in his daily life he encountered much evidence that somehow, in practice, the economic system was not functioning as well as the neat logic of theory indicated that it should. He underwent what R. G. Tugwell has described as the "nasty shock" experienced by "those who thought that a meliorative principle worked through the meanest tricks of competition to establish the best of all possible worlds." Now Hobson was a social man, a socially conscious man. He began to wonder whether price economics, mathematically exact and simple as it made the study of the economic aspects of life, did not oversimplify matters to the extent of leaving out some of the most important considerations in the economic sphere. And he felt the necessity of making his economic theory more functional, better adapted to the elimination of the injustices that moved him. But there is yet a third aspect of his personality—the artistic man. Thus moved to re-orient his economic thought, Hobson chose the aesthetically satisfying goal of establishing a theory based on human rather than material evaluation. And herein is found the potent directive force which Hobson has labeled "the definitely humanist and ethical trend of my Ruskinian thought." It is probably this conscious humanitarian aim which has earned for Hobson's economics the appellation "welfare."

MONROE LAZERE

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A Note on Mr. Higgins' "Indeterminacy in Non-Perfect Competition"[1]

Mr. Higgins rightly criticizes the failure in current economic literature to consider the contents of average revenue and average cost curves. Quite rightly, too,

[1] *Am. Econ. Rev.*, Sept., 1939, p. 468.

he points out that the assumption that individual producers will attempt to maximize their profits is only one of many assumptions that might be made in the analysis of any particular case. He, however, confines this qualification to cases of non-perfect (as he calls it) competition, of the non-tangency sort. On page 476, he says:

"In the analysis of perfect competition, the maximization of profits by entrepreneurs is a situation that must exist *ex definitione*. First, we are accustomed to defining normal profit as the 'transfer cost' of entrepreneurship; *i.e.*, the amount which is necessary to keep the firm in operation. Second, we exclude super-normal profits from the case of perfect competition. Therefore, entrepreneurs under perfect competition *must*[2] maximize profits or disappear altogether. The same analysis applies to the "tangency case" of monopolistic competition."

Not at all. It is normal profit that must exist *ex definitione* in a perfectly competitive situation—and normal profit is a purely subjective matter. It is that profit which just induces the entrepreneur to stay in the business. In monetary terms, it could be zero or even negative, though either of these is unlikely as a continuing phenomenon. It might very well be positive but less than what the entrepreneur might earn in some other line of activity, or even in the same line of activity, if he so wished. And the same reasons might deter an entrepreneur from maximizing his money profits under perfect, as under non-perfect, competition. That is, he might produce beyond the point at which his money profits are a maximum, counting the "prestige" attaching to the management of a large business, for example, as sufficient or more than sufficient to compensate him for the profits that he gives up. Or, he might sell at a lower price—although feeling that he might sell all he wished at a higher price—for philanthropic reasons, for example. Or he might pay wages higher than the market, for ethical reasons or for "the feeling of righteous self-satisfaction that goes with it."

That profits are a maximum in perfectly competitive markets is true in current literature, only by assumption. We do exclude supernormal profits from the case of perfect competition, but only because we assume that normal profits are maximum profits. Incidentally, of course, the types of monopoly equilibrium, described by Mrs. Robinson, for example, are true only by assumption. We conclude that the individual entrepreneur will produce that output at which marginal revenue equals marginal cost, only because we assume that he will attempt to maximize his net money profit. Actually, to assume that an individual's net money profit will be a maximum is to assume that he will equate marginal revenue and marginal cost. Any other assumption concerning the objective of business-men will lead to a different equilibrium position. In the absence of knowledge concerning the objectives of business-men, it is impossible to determine that equilibrium position. We must say, as the older economists used to say, that the individual entrepreneur will attempt to maximize his net advantage (whatever that may be). Truly, empirical research is needed, as Mr. Higgins suggests.

EDWARD S. LYNCH

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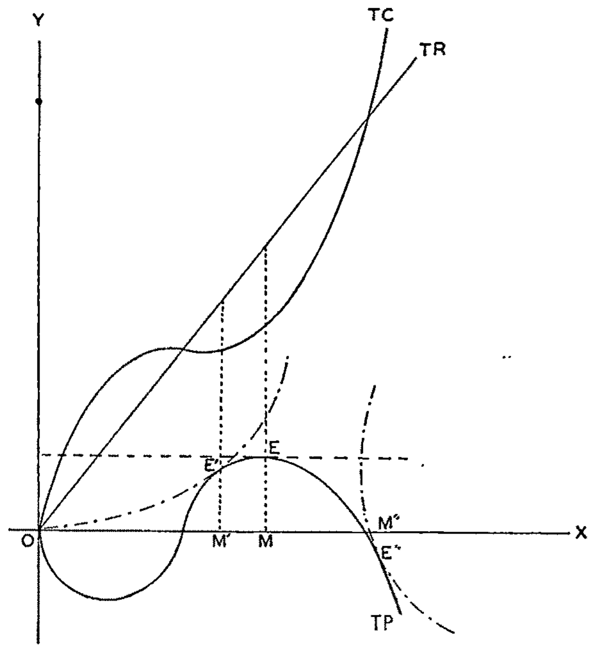
Reply by Mr. Higgins

I realize from Professor Lynch's note that I used the term "profits" somewhat ambiguously. In the passage that he quotes, the "profits" that must be maximized

[2] Italics his.

are supernormal profits. Following the usual practice, I was including normal profits as costs. When we do so, no equilibrium position is possible under perfect competition but that where the average cost curve is tangential to the horizontal price line, and "profits" in my sense are "maximized" at zero. If normal profits are zero or negative over certain ranges of output, the cost curve shifts and changes shape accordingly, so that equilibrium is still established with average costs equal to price. The same is true under conditions of monopolistic competi-



tion with freedom of entry, which leads to the "tangency" case. Zero or negative "normal" profits will make the cost curve different in position and shape from the usual case; but equilibrium is still established with average cost equal to price and supernormal profits "maximized" at zero.

What I failed to point out, and what Professor Lynch has now made clear, is that under "pure" as well as "non-perfect" competition motives other than the desire to maximize money profits must be considered. He also raises grave doubts in my mind as to the advisability of including normal profits as costs; this method seems to mask the truth. The apparatus set up in section IV of my article can be used to deal with pure competition (and the tangency case) in a more realistic manner. In the diagram above, *TR* is total revenue, *TC* total costs, and *TP* total profits for a firm under pure competition. If money profits are the sole consideration, the indifference curves will run horizontal to the base axis and equilibrium will be at *E*. When other motives are included, equilibrium might be at *E′* or *E″*. The marginal entrepreneur would be one who finds his equilibrium position on an indifference curve through the origin (as at *E′*), and who therefore has no subjective "producers' surplus." As Professor Lynch suggests, this position might

be one where money profits were zero or negative (as at E''), and might be on either side of the point of maximum money profits.

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Harvard University

Problems in the Teaching of Economics

At the last annual meeting of the American Economic Association in Philadelphia, one afternoon session was devoted to "Problems in the Teaching of Economics." Here, one of the speakers proposed that students should be encouraged to spend a year or two out in the business world before coming to college to begin the study of economics. Here, also, another speaker vigorously condemned the practice of those teachers who appealed to publishers for revised elementary economic texts that would include the more recent laws and facts relative to our economy. He, himself, had not earlier envisioned such reforms of his own text that would make up for the lack of inertia on the part of teachers.

Now it may be true that students would better comprehend many economic relationships following upon a year or two of employment. The same could be said about other subjects in the curriculum that the student would pursue upon his return. Such a proposal for revision in the teaching of elementary economics has little significance to the more essential nature of the problem involving the best presentation of the subject matter under the currently accepted assignment for the teaching of economics in a college education of four years. However much the study of economics helps to develop a realistic understanding of American economic life, this can and should be accomplished with an adequate explanation of the economic laws and principles that govern it in the course of which the rich but disorganized personal experience of students can be drawn upon.

In re the charge made in no uncertain terms against teachers of elementary economics, this much can be said. Academic advancements for the teacher, upon which increments in salary are made to depend, flow from "productive research." Because of academic preoccupations herein, little vital contact is made with the broader aspect of supplementary pedagogical devices. Teachers have come to depend upon the list of such devices customarily included in introductory economic texts. These have taken the shape of bibliographical aids, summaries of conclusions and lists of test questions that depart more or less successfully from the catechetical order. That the clamor for revision carries with it the hope that the new text will, to all intents and purposes, perform the teaching task in and of itself, is not hard to envisage under the circumstances.

Perhaps it can be said that other sessions at this conference meeting were of a more informative nature to a host of people. But from my knowledge of the reactions of others thereto, this thesis would be hard to sustain. Yet, assembled in a small room, grossly inadequate for the numbers who thronged the entrances, was this group of teachers anxiously concerned with the topics under discussion. Many would willingly have voiced their reaction to the contention of the speakers, if time had not been called. And when the motion was made to petition for a similar session at the next annual meeting (after a lapse of three years since the last of this kind was convened) it was readily carried. I hope that at future meetings of the American Economic Association, sessions on "Problems in the Teaching of Economics" will not be conspicuous by their absence on the agenda.

PETER D. SHILLAND

University of Illinois

Comment on the Pacific Gas and Electric Case[1]

In the December, 1939, issue of the *Review* there appeared an article which considered, along with other matters, the significance of the recent decision of the Supreme Court of the United States in the Pacific Gas and Electric case.[2] The authors summarize their conclusion in the following words: "It may be inferred that a majority of the Supreme Court now looks with favor upon the use of historical cost as the rate-base. No other conclusion is possible in view of the fact that the California Commission in this latest case expressly declared its adherence to historical cost and that it flatly refused to give any consideration to reproduction cost. . . . It seems rather clear that if the reasoning in this case is consistently followed, there will be few, if any, occasions on which a rate order based upon historical cost will be disturbed by the Supreme Court."[3] Since this conclusion might be taken to mean that the Supreme Court is at last ready to place its stamp of approval upon the use of historical or original cost in confiscation cases, the discussion of this important decision should be carried a step further.

The question before the Court was not one of confiscation, but of procedure. "As the District Court did not deal with the issue of confiscation and the evidence is not before us, we are concerned only with the question of procedural due process, that is, whether the Commission in its procedure, as distinguished from the effect of its order upon respondent's property rights, failed to satisfy the requirements of the Federal Constitution." And the particular procedural point in dispute related to the method by which the California Commission arrived at its result. The Commission had considered evidence as to cost of reproduction, but in fixing the rate base it had given weight and effect solely to historical cost. The precise issue was whether the refusal of the Commission to give weight to the cost of reproduction constituted a denial of *procedural* due process of law.

The Court held that the procedure of the Commission did not deny the company due process. It found that the Commission had duly weighed the evidence as to reproduction cost, and had cast it aside as unsatisfactory; but that it had nevertheless based its valuation upon ample evidence. "The Commission was entitled to weigh the evidence introduced, whether relating to reproduction cost or to other matters. The Commission was entitled to determine the probative force of respondent's estimate. That the Commission did so is apparent from both its statement to that effect and the reasons it gives for considering these estimates to be without positive value. . . . Nor did the ruling with respect to the weight of evidence as to reproduction cost leave the Commission without evidence of the value of respondent's property. We have frequently held that historical cost is admissible evidence of value. . . . In the instant case we cannot say that the Commission in taking historical cost as the rate base was making a finding without evidence and therefore arbitrary."

In other words, this decision only reiterates a well established principle of procedure—namely, that it is essential to examine and give appropriate weight to all pertinent evidence of value, so that a decision will not be arbitrary. From a

[1] *302 U. S.* 388 (1938).

[2] G. L. Wilson and J. R. Rose, "Some Recent Trends in Public Utility Regulation," *Am. Econ. Rev.*, vol. 29, pp. 746-759 (December, 1939).

[3] *Ibid.*, pp. 749, 750.

procedural point of view, evidence of cost of reproduction may be considered as having received adequate weight if it is carefully examined, even though the evidence is found to be without force. But it does not follow that evidence of cost of reproduction would be given sufficient weight in a confiscation case if it were merely carefully examined. Here the courts look to the actual results in dollars and cents, and it might very well be that a commission's refusal to give actual weight to cost of reproduction would result in rates unfairly low in the eyes of the court. The force of the O'Fallon decision, in fact, is that the cost of reproduction must receive weight in the final result, provided, of course, that the evidence is substantial.[4]

Had the issue in the Pacific Gas and Electric case been one of adequacy of rates, the decision of the Court might have been different. So much seems to be implied by the following words: "Respondent was entitled to contest the value thus placed upon its properties, or any part of them, to insist that the value taken as the rate base was too low, and that in consequence the prescribed rates were confiscatory. That was the issue upon which the court below should have passed."

While it may be true that a majority of the Supreme Court does favor historical cost, it can hardly be said that the Pacific Gas and Electric case establishes this fact. There is yet no reason to conclude that the Court has necessarily departed from its position in the Los Angeles Gas case, where it said: "And mindful of its distinctive function in the enforcement of constitutional rights, the Court has refused to be bound by any artificial rule or formula which changed conditions might upset."[5] It appears that "fair value" is still a matter of judgment subject to judicial review.

TRUMAN C. BIGHAM

University of Florida

Supreme Court's Attitude toward Historical Cost

In a recent article[1] the latest Pacific Gas and Electric decision was interpreted to mean that "if the reasoning in this case is consistently followed, there will be few, if any, occasions on which a rate order based upon historical cost will be disturbed by the Supreme Court."

As long as the Fair Return doctrine continues to be the basis on which the Court judges the constitutionality of a given rate level, economists will be keenly interested in knowing whether the law of the land requires that reproduction cost be considered in determining the rate base; and the authors' conclusion, if it can properly be drawn from the opinion cited, is indeed of signal importance. It should be noted, however, that the question presented to the Supreme Court was strictly procedural—namely, whether the rejection of reproduction cost evidence constituted a violation of the due process clause. The issue of confiscation was not involved.[2] If, in the future, complaining public utilities plead the

[4] *279 U. S.* 461 (1929).

[5] *289 U. S.* 287, 305 (1933).

[1] "Recent Trends in Public Utility Regulation," G. L. Wilson and J. R. Rose, *Am. Econ. Rev.*, Dec., 1939, p. 746.

[2] "As the District Court did not deal with the issue of confiscation and the evidence is not before us, we are concerned only with the question of procedural due process. . . ." 302 U. S. 392.

confiscation issue directly, the courts will find nothing in the Pacific Gas and Electric decision to preclude their accepting and weighing reproduction cost evidence even though that evidence may have been rejected by the commission. Consequently, it is entirely possible that many rate orders based on historical cost may be disturbed by the courts without doing violence to this decision.

Until the Supreme Court approves the rejection of reproduction cost evidence in a case directly involving the confiscation issue, a conclusion as broad as that of the authors must remain open to question.

ROBERT W. MAYER

Lehigh University

Copies of "Storage and Stability" Made Available

Professor Frank Graham's paper on "The Primary Functions of Money and Their Consummation in Monetary Policy," read at the December, 1939, meeting of the Association (and published in the March *Proceedings*) contains a very welcome endorsement of my proposal (contained in my book, *Storage and Stability*, McGraw-Hill) for a commodity reservoir to operate through the medium of a commodity-backed currency.

I hope that this presentation will receive the considered attention of economists. With that in view I shall be happy to present a copy of the book to such members of the American Economic Association as may request it. This offer implies (1) that the recipient read the book with care, and (2) that he subsequently donate a copy to his school or town library if it has no copy of its own.

BENJAMIN GRAHAM

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Professor Litman's Review of The Invisible Tariff

Professor Litman in his review of my book, *The Invisible Tariff*, in the *Review*, March, 1940, credits me with believing that the "growing power of the executive to deal with foreign trade problems . . . is inconsistent with our democratic form of government." He implies also that I do not appreciate the advantage, from the point of view of effective management of foreign-trade policy, of giving larger powers to the administrative branch of the government, *i.e.*, to the President.

A more careful reading of my introductory chapter, I believe, will show that it does not justify these implications. The book stresses the merits of handling tariff matters by administrative agencies, as for example in the Trade Agreements Program. I do not at all hold the view that a larger measure of administrative control over import trade is inconsistent with democratic government. But democratic government *is* threatened when administrators use for general political ends the power which Congress gave them for more limited purposes, *viz.*, for the expansion of exports, or for the protection of the domestic market against unfair competition from abroad. The view I expressed was that if Congress wishes American tariff policy to be used to influence the course of a war in Europe or in Asia, it should say so; administrators should not stretch the meaning of federal statutes to accomplish these purposes.

PERCY W. BIDWELL

Council on Foreign Relations

General Works, Theory and Its History

Capitalism the Creator: The Economic Foundations of Modern Industrial Society. By CARL SNYDER. (New York: Macmillan. 1940. Pp. xii, 473. $3.75.)

To quote the author, "The one special purpose of this volume is to inculcate the doctrine that economics must be studied as a science, through measurement, as in other sciences, and through these to discover the mechanisms that govern economic phenomena."

Three main factors are analyzed: growth trends, cyclical fluctuations and inequalities of income and saving. Liberal use of charts presents the statistical data. The charts on long-term growth trends show the parallel development of industrial production, machinery, invention, power and capital investment. This parallelism is offered as proof of the proposition that economic progress is in proportion to the encouragement of capital accumulation and of inventive genius.

The measurements of business cycles are concerned with the interrelationships between fluctuation of production, profits, bank credit, velocity and commodity prices. Snyder is an exponent of prevention of major depressions by credit control and concludes that capitalism cannot save itself from destruction unless this control is learned by the leaders of finance and politics and exercised boldly as a part of enlightened statesmanship.

The principal quantitative method employed to demonstratate the inequality of income is the Pareto Curve. The capital accumulation of the past, according to Snyder, was possible because of this inequality, and the surest way to destroy it in the future is to destroy inequality of income and wealth. His views on this subject are in sharp contrast to those recently expounded by government experts in testimony before the Temporary National Economic Committee.

To economists, the interest in the book is largely in its demonstration of the quantitative method. Snyder attacks the theories, abstractions and opinions which dominate so large a portion of economic writing, and appeals for more of the hard work of fact-finding and statistical measurement. He assaults the conventional economic methods, not in any half-hearted manner but with sledge-hammer tactics. He is a crusader for welfare and progress but believes that most of the popular social economic doctrines of the day are supreme nonsense.

An author who attacks so severely must expect his critics to counterattack. His conception of proof will not satisfy everybody. Some of his statements are too emotional. But these faults are minor. Snyder has made a great contribution to economic methodology. This book is the culmina-

tion of his life work in statistical research and is replete with his philosophy of life and of the meaning of mankind's struggle to advance the standard of living. It deserves to be rated as a major contribution to that type of economic thought which seeks to pioneer and to explore new approaches to knowledge. Disciples of theories about "the mature economy" and "economic stagnation"—Hansen, Soule, Berle—have met in Carl Snyder an antagonist who strikes back with power.

LIONEL D. EDIE

New York City

Value and Distribution: Some Leading Principles of Economic Science. By LEWIS H. HANEY. (New York: Appleton-Century. 1939. Pp. xvii, 734. $4.00.)

This book may, for convenience, be divided into three parts. The first part (four chapters) provides background for the explanation of the determination of economic value. The subjects of the four introductory chapters are: a general critique of economic theory; the basic assumptions of economic science; the genesis and general nature of value; and the nature, cause, and final definition of economic value. The determination of economic value (four chapters) may be thought of as comprising the second division of the book. These chapters include a discussion of monopolistic competition and the value of money. Monopolistic competition is developed in terms of the "Theory of Railway Rates." The third part of the book deals with distribution. Chapter 9 presents the meanings which have been assigned to the concept of distribution, and the relation of distribution to economic life. Chapters 10 to 13 deal with wages, interest, profits and rent.

The author expressly indicates that the type of theory he is presenting may be called "Equilibrium Economics." There has been for some time a definite need for a clear, rigorous, and consistent statement of value and distribution theory from the point of view of equilibrium analysis. Alfred Marshall's presentation is still the best general approach, although there has been considerable advancement since the formulation of his *Principles*. In particular, the development of equilibrium value and distribution theory has been rapid since 1920. While these recent developments have been important, little attention has been paid to the general and complete statement of the theory, so that considerable confusion exists. The volume under review does not consolidate the newer material into anything that might be called a coherent and well-rounded formulation of equilibrium value theory. It will be a disappointment to anyone seeking that kind of presentation. The book may be characterized quite fairly as an enlargement of the value and distribution chapters generally included in the normal college text on principles. More space is given to the methodological concepts conditioning the author's presentation. To the students with limited back-

grounds in the literature of methodology, this may be more confusing than helpful. Perhaps Professor Haney's methodological outlook can be summed up by the following quotation:

> In the author's judgment, scientific definitions must be in terms of causal forces and functions. Only in such terms, it seems, can one ever be sure that the definition will always define (p. 224).

Classification of the ideas is somewhat overdone, along textbook lines. Particularly disconcerting is the general practice of substantiating a given point of view, not by argument, but merely by assertion. Equally annoying is the practice of establishing the argument by the principle of being on middle ground. On the whole, the equilibrium approach is maintained and clearly stated:

> The attitude taken by the author, and the one which seems to be expedient in economic science, is simply this: We consider conditions as found at any given moment of time, and base our reasoning upon the *tendencies* which arise from those conditions. At any given time, we may ask the question, Whither is the market tending, and have a basis for answering it (p. 307).

To some readers it would have been the part of wisdom to conclude the above statement by pointing out that, while the equilibrium analysis gives a basis for answering the question, "Whither is the market tending?" it does not necessarily tell where the market really arrives in the world of reality.

Perhaps it is still too early to expect a concise presentation of the problem of economic value, of the place of the static equilibrium approach to the problem, and in addition a clear statement of both the advantages and limitations of equilibrium theory. The importance of equilibrium theory is not diminished, but rather increased, by a clear statement of the limitations of such theory from the standpoint of providing an accurate analytical description of the determination of economic values in the world of reality.

RAYMOND T. BOWMAN

University of Pennsylvania

Elements of Marxian Economic Theory and Its Criticism. By WILLIAM J. BLAKE. (New York: Gordon. 1939. Pp. viii, 746. $3.75.)

A new introduction to Marxian economic theory was badly needed. Most of the earlier written books are either inadequate or have become obsolete; and none present an up-to-date summary of the debates among Marxians and non-Marxians on the meaning and validity of Marx's theorems. Some readers may feel that Blake's book might have been improved had he presented Marxian economics in its philosophical setting—he gives only a short appendix on Marxian philosophy—but it was really a wise move to confine the material strictly to economic theory. Disentangling the confused

discussion of historical materialism and dialecticism would not have been possible in a textbook of manageable size without unduly curtailing the space for the economic exposition.

Mr. Blake is an extremely industrious reader, and has worked through Marxian literature and the writings of the critics with model thoroughness. Unfortunately he does not give his reader the full benefit of these labors, since quotations and even citations of individual passages of Marx's work are almost entirely lacking. Many passages in the book make it clear that the author wanted to write not a neutral exposition but a critical analysis of Marxism and the theorems of its opponents. Yet on Blake's long intellectual travel he has apparently failed to discover a single fault, or even a logical gap which remains to be filled, in the Marxian-Leninist doctrines. He finds no contradiction between the Marxian theorem that presents labor-time as the determinant of exchange relations by inherent necessity, and the other theorem of Marx that competition causes exchange relations to deviate from the labor-time rule. Marx's failure to develop his accumulation schemes (*Capital,* vol. ii, chapters 20 and 21) does not, in Blake's opinion, justify any doubts as to the ultimate meaning of these schemes—Lenin's interpretation is to be accepted as final. Nor does Blake acknowledge any logical inconsistency between Marx's rejection, on fundamental grounds, of the under-consumption theory (*Capital,* vol. ii, 4th German ed., 386) and Marx's theory of the business cycle (*Capital,* vol. iii, chapter 15) which seems to make use of the under-consumption argument. Now, without going into any details, certain obvious facts are apparent which offer at least a *prima facie* argument against such a wholesale defense of the Marxian-Leninist position. Large sections of Marx's main work were left by him in an unfinished state, and some of the most important chapters are evidently not an expression of considered opinion but preliminary notes intended to preserve ideas for later elaboration. In the course of this elaboration many of his ideas would undoubtedly have been modified, and if Marx could return to this earth it does not seem likely that he would find his own work as unimpeachable as does Mr. Blake. Nor does it seem probable that Marx would approve of all the means by which Lenin tried to complete the body of Marxian theory, for Lenin developed only one aspect—revolutionary dialectics—and ignored the strong gradualistic elements in Marx's thought. Thus Blake would have a hard time in defending his orthodoxy before the master.

Mr. Blake also tries to relate Marxian theories to present-day realities, and here he commits his most flagrant mistakes. "The worker," he writes (p. 228), "now is worse off than in the early epoch of capitalism in that he is thrown out of a job not merely by machinery but by crises as well." But were there no crises in the early nineteenth century? Like many other authors, Blake does not give enough weight to the fact that large-scale un-

employment existed in England (and in other countries) long before the heyday of industrial capitalism. "Why was England's inflation stopped by foreign receipts, and yet Germany's difficulties unchanged by foreign borrowing?" (p. 407). The answer lies in a simple fact which destroys Blake's Marxian implications: Germany could borrow only after her inflation, while England received income from abroad during her currency difficulties. "In the United States, during the highest prosperity period the index of wages in terms of the cost of living fell from 1921 to 1929 by some 4 per cent" (p. 478). Blake could have seen from the *Statistical Abstract* or from Paul H. Douglas' book, *Real Wages in the United States, 1890-1926* (from which Blake quotes in another passage) that this amazing statement is without foundation. "It is not commonly known that six years before Hitler a fifth of the German production was in armaments" (p. 484). It would indeed be desirable that even the few people who have this absurd figure in mind try to forget it as quickly as possible. It is unfortunate that Mr. Blake rarely indicates the sources from which he took such factual information, for which he is, without any doubt, not primarily responsible. He evidently relies very much on Jürgen Kuczynski, who, whatever his qualities as a statistician, is so anxious to make a case for the Marxian theorems that his statements should be compared with those of other authorities before being used in an historical analysis. (It is also very confusing for the reader that Kuczynski's formula for "relative wages" is reproduced—on p. 481—with a bad printing error that entirely distorts the meaning.)

Yet, with all the annoying weaknesses, the completeness of this book makes it valuable, and there are many interesting remarks in the volume. The literary appendix is excellently done. The tone is free of that cocksureness often found in the books of other protagonists of the Leninist interpretation of Marx. Mr. Blake is prejudiced but not a fanatic, and he tries hard to be fair toward such critics of Marx as Böhm-Bawerk. The book can be very useful for class instruction if the teacher takes the precaution of warning the students in advance against the misleading errors.

CARL LANDAUER

University of California

Modern Economic Problems. By ALBERT L. MEYERS. (New York: Prentice-Hall. 1939. Pp. xvi, 311. $2.50.)

The conventional elementary economics course is cursed with an unnatural dichotomy between "Principles" and "Problems." The principles text typically used for the first half-year irritates the student by its apparent abstraction from any real or significant problems. The problems text, on the other hand, tends to be a jumble of institutional miscellany illuminated by no single set of principles, least of all those learned in volume 1. The easy

way out of this difficulty, a way which seems to be currently popular, is to abandon any attempt to teach principles, turning the course into a sort of current events club. The hard and much the more fruitful way is to attempt a marriage, illustrating theory with significant applications and attacking current problems with the tools of economic analysis. It is this latter task that Mr. Meyers has attempted.

The attempt is to be applauded as an effort in the right direction; but the difficulties to be overcome are well illustrated by certain defects in this book. The problems covered are public finance, transportation, agriculture, forms of business ownership, combination and monopoly, international economic policy, labor, and planning in various sorts of societies. The brevity of the book has made it impossible for the author to include any satisfactory account of the current situation or any considerable amount of factual material. The argument is general throughout with little or no concrete illustration. Possibly it is expected that this will be provided in classroom discussion, but a reading of the text does not give one that sense of grappling with actual problems that can give an analysis body and significance. The section on agricultural policy is much the best in this respect, possibly because the author is himself currently working in the field.

In general, the analytic sections have all the clarity of Mr. Meyers' first book on principles, though occasionally this is at the expense of substance. The chapter on the shifting and incidence of taxes, for instance, is an excellent theoretical exercise in the manipulation of the standard marginal revenue—marginal cost diagram under a variety of assumptions, but the conclusions are a little too glibly automatic to satisfy the average fact-minded student. This is unfortunate in that theory, carefully embellished with illustration and practical modification, can be especially enlightening in the discussion of this subject.

There are occasional spots where the author plunges light-heartedly into waters far too deep for the first-year student. For instance, in the twenty-five page chapter on government borrowing he covers the whole Keynesian case for an unbalanced budget, introducing the marginal propensity to consume, the multiplier, and the algebraic relations between them in six pages and criticizing these concepts extensively in a few more. This whole discussion assumes that the student knows what is meant by investment and why there is a relation between investment and income. At one point the term "marginal efficiency of capital" appears with no definition or description of its meaning at all.

On the other hand there are places where Mr. Meyers makes rather disappointingly little use of quite simple theoretical tools. There is no discussion, for example, of the implications for the concept of the entrepreneur of the form of the modern corporation; the discussion of imperfect

competition fails adequately to distinguish between what is good for the firm and what is good for society (a distinction on which analysis can throw much light), and the analysis of socialism makes much less use than it might of recent fairly simple work on the pricing problem in a socialist state. Further, the general concepts of economic welfare on which particular judgments should be based are neglected almost entirely. But these are counsels of perfection. Mr. Meyers has tried to write a kind of text which is all too seldom attempted; and if his path from the ivory tower to the market place is somewhat bumpy, he may have stimulated other road builders.

MAX MILLIKAN, 2ND

Yale University

Le Mécanisme des Prix. By LOUIS BAUDIN. (Paris: Lib. Gén. de Droit et de Jurisprudence. 1940. Pp. 153.)

The framework of Professor Baudin's treatment of the price mechanism is the traditional one. Besides attempting to synthesize some of the outstanding modern interpretations of the functioning of the price system, Professor Baudin has a definite politico-economic objective. Recognizing the fact that recent attacks on the theory of prices have been directed at the very core of prevailing economic theory and had therewith questioned the individualistic economy as such (p. 2), Professor Baudin intends to provide himself and economists who think like him with the necessary tools to counter such an attack.

Professor Baudin reasons that the essential elements of the classical and neo-classical school can still be maintained as correct today. There are two aspects which he emphasizes as relevant. First, he points out that the *milieu* has depersonalized the modern individual. Here he follows the interpretation of the fascist philosopher, M. Ortega y Gasset, who refers to this phenomenon as the "*homme-masse.*" This *masse* in turn appears—as it did previously to Pareto—to be led by an *élite* which directs the economic process.

Second, the modern price mechanism is characterized by a collective psychology that operates over a *period of time*. Here Professor Baudin makes a distinction between the *economic dimension* and the *economic horizon*. The economic dimension refers to the procedure that buyers who determine the demand by future prices rather than by present prices can be guided by the prices of the past, which, because of the "invisible etiquette" of their *milieu*, are present in their mind when they arrive at the market. The economic horizon refers simply to our ability to act on anticipations.

The second part of the book concerns the problem of price *movements*. All movements exhibit a cyclical rhythm which must be regarded, as in philosophy, as "the soul" which exists *in time* and which wisdom com-

mands us to conform to (p. 86). In consequence, "all the forces of the nation must work together . . . in order to change the economic factors to make them fit this rhythm as far as possible in order to reduce the disparities. . . ." The method proposed for investigating these movements consists of studying the prices "by categories" and not as totalities. In general, movements are represented as imposing themselves upon us, and we must live under them "si déplaisant que ce fait puisse être."

In the last part Professor Baudin tries to deal with the paradox that to suppress prices means to plunge into chaos, and that to fix prices is useless as long as the price coincides with the equilibrium price, or is dangerous if this coincidence does not exist. Professor Baudin dissolves this paradox, however, by declaring that "interventions can be justified under the title of exceptional and temporary interventions" (p. 147). Interestingly enough, Professor Baudin here refers in his footnotes to experiments along these lines that have been carried on in fascist Germany and corporative Portugal.

Taking the book as a whole, Professor Baudin has tried in it to solve a still greater and far more important paradox—namely, that of freedom and dictatorship. The intention of this book seems to have been to provide a system of reasoning which, to use his own term, allows for the "illusion of liberty" (p. 19) and the reality of dictatorship by an élite at one and the same time.

KARL H. NIEBYL

Carleton College

Ekonomisk Teori. I. De Ekonomiska Kalkylerna. By JOHAN AKERMAN. N. F. Avd. 1, Bd. 36, Nr. 2. (Lund: Lunds Universitets Arsskrift. 1939. Pp. 286.)

A few years ago Akerman wrote, "The methodological problem is, in a great measure, the real problem. The greatest difficulty is perhaps involved in the fact that economic methodology is neither strictly an arbitrary exogenous question, as in history, nor an endogenous problem inherently correlated with the real problem, as in mathematics. It is a noteworthy and significant fact that the founders of the historical and mathematical schools, Schmoller and Walras, both laid stress on the double tracks in economic theory, on inductive and deductive analysis."[1]

The attempt to synthesize these double tracks into a single effectively coordinated methodological framework has marked the whole trend of Akerman's thinking in recent years. He emphasizes the sterility of classical and neoclassical "explanations" of the total economic structure in terms of

[1] "Annual Survey of Economic Theory: The Setting of the Central Problem," *Econometrica*, vol. 4, no. 2, April, 1936, p. 99.

a static equilibrium utilizing the utility principle to reduce the varied motives and activities of diverse individuals and groups to a common denominator and to abstract them from their institutionalized, time-conditioned setting. Tracing the futile efforts of more modern schools to render the analysis dynamic by introducing into the "natural order" framework of equilibrium equations a change factor through capital, money, risk or anticipation theories, he points out that they fail to take into account the essential "dualism between theory and actuality, between rationalization of activities and actual time trends."

To cope with this dualism—this inconsistency between the subjective choices of individuals based upon fixed assumptions as to economic conditioning factors, and the changes in these factors constantly introduced by the passage of time—Akerman proposes to include both valuation and time within a common framework on a symmetrical and simultaneous basis. Characterizing his analytical units as "periods of specified activity," he makes them the common meeting ground for the *kalkylmodeller* or rationalized calculations of acting individuals and the economic driving forces revealed in a structurally determined, timebound *kausalanalys*. Kalkylmodeller describe logically and timelessly the economic valuation patterns as static cross-sections always forward-directed, discontinuous in time, and reversible within the logical sphere. Kausalanalys deals with time-determined events within a continuous causal chain both forward- and backward-directed and irreversible in the actual sphere. Only the latter are prognostic in terms of probabilities constantly corrected by actual trends; on the other hand the valuation patterns are indispensable descriptions of the processes, however rationalized, through which actual trends are put into motion and kept going.

The valuation patterns (to which part 1 under consideration here is devoted) are worked out on the basis of six economic principles carefully framed with respect to the diverse individuals or groups who exercise choice, in order to avoid the classical "melting pot" of economic activities. Thus an initial distinction is drawn between calculations limited to economic alternatives within a given market situation, and those which take account of their influences on the market. In the sphere of market adjustment (*marknadsanpassning*) Akerman develops the "buying" principle involving maximization of marginal utility (for both consumers and enterprisers), the "production" principle dependent upon production margins, and the "selling" principle establishing an identity between marginal cost and marginal revenue. In connection with market control (*marknadsdirigering*) he distinguishes the "monopoly" principle dependent on price manipulation, the "expansion" principle which is directed toward an increase in volume and income independently of price relationships, and the "stabilization" principle which aims at a balanced allocation in time of

productive services in relation to value of money. The "expansion" principle applies to both enterprises and states, but the "stabilization" principle is primarily associated with the state.

Finally these six principles are brought together on the common basis of activity and time. From the economic actor's own point of view these various valuation patterns, distinct in principle, are integrated by the fact that the final decision must be the result of a combination of criteria. For example, large enterprises base their choices upon a simultaneous consideration of income, production, sales and monopoly principles, and even in certain circumstances, expansion and stabilization. But only in a purely conceptual perfectly competitive ("ideal type") society, or in the other extreme of a purely planned economy, will the assumptions underlying these rationalized valuation patterns coincide with the actual economic setting. Disparity arises from the fact that the time perspective (*blickfält*) for different groups varies in length. The consumption principle operates more or less as a momentary utilitarian reaction; the time perspective associated with the production principle is somewhat longer and roughly proportional to the ratio of fixed to total cost. Sales and monopoly decisions necessarily work with still longer forward perspectives, while the efficiency of the expansion principle depends upon the far-sightedness with which it is applied. Finally the concept of stabilization is little more than a "schematized expansion principle" if based on the short run; but it approaches the notion of equilibrium as the perspective lengthens.

In the construction of a realistic synthesis of *kalkylmodeller* and *kausalanalys* "everything depends on the choice of standard periods and on the correlation of period and activity; *i.e.,* the process of valuation stretching over the same space of time as the measurable period of quantitative change." It might be indicated here that Akerman's earlier works suggest that part 2 on "Kausalanalys" will work with the year as the natural unit of time covering the activity of wholesale and retail trade as well as of agriculture, the business cycle as the activity period of industrial capital formation, and a secular wave covering the activities of a generation's saving and of state and communal capital formation. Thus the ultimate methodological synthesis emerges as an analysis of time-bound and institutionally relevant valuation patterns as the economic mechanisms which are constantly and gradually modified through structural modifications.

Any evaluation of this remarkably eclectic analysis must above all avoid the pedantry and dogmatism of which it is so conspicuously free. Akerman has succeeded in utilizing much of the best content of all the important schools of thought, old and new, and reorientating them into a novel methodological framework that is of fundamental and challenging significance. Interest in method, it is said, is a symptom of intellectual senility, but certainly competent methodological inquiry demands a degree of open-

mindedness, vigor and penetration not ordinarily characteristic of superannuation.

FINN B. JENSEN

University of Kansas

NEW BOOKS

BEER, M. *An inquiry into physiocracy.* (London: Allen and Unwin. 6s.)

BELLIERI, A. *Dal naturalismo al neo volontarismo: la dottrina economica di J. C. L. Sismondo de' Sismondi.* (Milan: Giuffrè. 1940. Pp. 264. L.30.)

BRATT, E. C. *This unbalanced world.* (New York: Harper. 1940. Pp. x, 220. $2.50.)

CARLSON, S. *A study on the pure theory of production.* (London: P. S. King. 1939. Pp. vii, 128. 8s. 6d.)

Although there are several excellent monographs on the formal theory of production available in German (in particular, those of Stackelberg and Schneider), there has been no equivalent work in English. Dr. Carlson is to be congratulated on surpassing these German monographs in the process of fulfilling this need. His small volume contains an elegant and lucid, if condensed, restatement and synthesis of the better known sectors of the theory of production. If there is little in his work that is new, there is also very little that can be questioned.

Approximately the first half of the monograph is devoted to the theory of costs and the determination of homogeneous output of a single firm. This analysis is "mono-periodic" (*i.e.*, the firm invests and disinvests completely within one time period), and both perfect competition and simple monopoly are considered. The results closely follow those of Frisch and Schneider, and their apparatus of production indifference curves is employed. The one noteworthy omission is the failure to discuss the stability conditions (developed by Hicks, Allen, Stackelberg, and Mosak); had they been introduced, the analysis of effects of changes in prices and technology (pp. 69-73) could have been much more precise and informative.

The chief criticism of the content of these chapters that the reviewer would make concerns the ambiguous treatment of fixed costs. Fixed costs are defined in the usual manner (as costs independent of changes in output); but since in Dr. Carlson's scheme, all productive services are purchased at the beginning of the period (p. 14), all are adjusted to probable output. The distinction between fixed and variable costs then vanishes unless there are changes of output within the period, and this phenomenon of changing output is not (and cannot be) present in his theoretical model.

The topic of multiple products (joint cost and joint demand) is the subject of the second half of the monograph. Under this head, Dr. Carlson adopts the neat procedure of treating "poly-periodic" production (production in several time periods) as a case of joint production, in which the products in different time periods are treated as joint. It may be remarked that it is also possible to treat with discriminating monopoly in the same way; in this case the portions of the supply of a commodity sold in different markets are treated as different commodities.

The precise scope of the study may be defined by listing the topics usually included in the theory of production which are not covered in the monograph. No attention is paid to the industry in the case of competition, to market forms other than perfect competition and simple monopoly, or to all those problems,

except for the relatively simple case of interest, which are usually connected with the passage of time.

Misprints appear in formulas on pages 20, 83 (note), and 97, and Figure 14 (p. 52) contains an error (C_t and C_v should be parallel).

GEORGE J. STIGLER

FAIRCHILD, H. P. *Economics for the million.* (New York: Modern Age. $2.50.)

GINZBERG, E. *The illusion of economic stability.* (New York: Harper. 1939. Pp. xi, 275. $3.)

Ginzberg's book explains the origin of the belief, held by American public opinion from 1922 to 1929, that the causes of economic instability had been conquered, and gives the reasons for the reëmergence of the same illusion in 1933. It was an interesting and original idea to trace some of the intellectual roots of the New Deal to the "New Era" prosperity period, and it is all the more useful since the author never permits the similarities which he discusses to overshadow the essential differences between the two periods. The book is excellently written and equally well documented. Ginzberg combines a wide knowledge of facts with theoretical training, common sense, and a great ability to summarize his findings in a succinct and lucid manner.

The book suffers, however, from a weakness in its theoretical foundation. To make the reader understand the nature of the illusion, it would have been necessary for the author to tell exactly why he considered economic stability unattainable. Mr. Ginzberg, who is undoubtedly a good theoretician, makes some attempt to prove the futility of stabilization efforts which depend on the known techniques, for instance when he criticizes the theory of high wages, but the attempt is unsystematic and, in places, not free from the appearance of self-contradiction. This reviewer fails to see how Mr. Ginzberg can reconcile his belief in the elements of the Keynsian theory, evident on pp. 129-130, with his disbelief in the possibility of economic stabilization, since the Keynes theory logically leads to the conclusion that the means to stabilize an economy are at hand. To be sure, Mr. Ginzberg could not have presented a complete theory of economic fluctuations in addition to a large amount of facts in a volume of this size. But he could have called the reader's attention to the defects in the theoretical basis, which were caused by the limitations of space.

As it is, the reader may well be misled by the smoothness of the author's argument to the belief that it is established beyond doubt. However, the book is among the most interesting and useful that the reviewer has seen in the 1939 crop of economic literature.

CARL LANDAUER

v. GOTTL-OTTLILIENFELD, F. *Wirtschaftspolitik und Theorie.* (Berlin: Junker und Dünnhaupt. 1939. Pp. xii, 240. RM. 10.)

The author aims to explain the relation of political economy and theory from the scientific point of view. He is definitely on the side of the nazi régime, with whose demand he concurs that the scientific search for truth must stand in the service of the nation as the nazis conceive it. He argues that the science of economics is badly off unless its theories obtain their pragmatic sanction from politics. He is therefore in agreement with the contemporary cult of opportunism. He makes the foolish implication that Anglo-Saxon economy of the market is invalid because Ricardo, the Jew, was one of its major inspirers.

HERMAN HAUSHEER

HUTT, W. H. *The theory of idle resources.* (London: Jonathan Cape. 1939. Pp. 193. 6s.).

Professor Hutt believes the clue to the understanding of the chief economic and sociological problems of today to be a struggle in progress against the disrupting equalitarian effects of competitive capitalism. Competition and capitalism are hated today because of their tendency to destroy poverty and privilege more rapidly than custom and expectations established by protections can allow. Private interests, with the help of the state, try to protect themselves against this trend by restricting production. This restraint on productive power brings about wasteful idleness, both in labor and in physical things, but is accepted because it defends an existing and customary distribution.

After this emphasis upon the doctrine of laissez faire, wasteful idleness is rigorously examined. The term "idleness" is used instead of "unemployment" for the latter term has become associated with the idleness of labor, and the author is concerned with idleness in all resources and factors of production. Keynes is criticized for not taking this broader view (pp. 24, 34-35).

A new terminology, developed and analyzed with much precision and originality, describes causes of idleness in a competitive capitalistic system. While application has not been made of these ideas to monetary theory (p. 185), except in the consideration of the theories of Keynes, it is pointed out that even a perfect monetary system would not bring about productive efficiency if vested interests, resulting from restriction of competition, determined distribution.

The last paragraph of the book stresses the idea that wasteful idleness arises through the restriction of competition.

GEORGE W. SANFORD

LINDAHL, E. *Studies in the theory of money and capital.* (New York: Farrar and Rinehart. 1939. Pp. 391. $3.50.)

McDONALD, W. J. *The social value of property according to St. Thomas Aquinas: a study in social philosophy.* Phil. stud. no. 48. (Washington: Catholic Univ. of America Press. 1939. Pp. 208. $2.)

PAGE, C. H. *Class and American sociology: from Ward to Ross.* (New York: Dial Press. 1940. Pp. xiv, 319. $3.50.)

PEDERSEN, J. *Das Gleichgewicht der Wechselkurse und seine Bestimmungsgründe.* Kieler Vorträge 58. (Jena: Fischer. 1939. Pp. 20.)

This is a lecture delivered before the Kiel Institut für Weltwirtschaft concerning the question as to what, if anything, constitutes normal or equilibrium exchange rates. Cassel's theory of the parity of purchasing power is dismissed, somewhat lightly, it seems, as a quasi-truism incapable of explaining deviations from equilibrium exchange rates such as necessitate occasional revaluations of currencies. According to the author, equilibrium exchange rates appear to be such rates under which a country with normal employment conditions is balancing its current foreign trade accounts. Within such a balanced economy he finds one factor particularly capable of strong, independent variation—namely, the wage level. He thus arrives at the conclusion that equilibrium exchange rates should vary essentially as the wage levels in the respective countries. Further on the question is raised as to the soundness of exchange rates artificially fixed in a state-controlled economy. Here the author finds that with the necessary consistency in manipulating production, consumption, wages, and

foreign trade any exchange rate can be indefinitely maintained without unbalancing the national economy. Several tables of exchange rates, wage and price levels for various European countries are included and analyzed in the light of the theory.

JOHN V. SPIELMANS

SCHORER, E. *Das Wesen des Zinses.* (Jena: Fischer. 1939. Pp. xii, 156. RM. 5.)

WERMEL, M. T. *The evolution of the classical wage theory.* (New York: Columbia Univ. Press. 1939. Pp. xii, 190. $2.25.)

In this study the author begins with an examination of the views of seventeenth century writers regarding labor and wages, and follows the evolution of wage theory down to Ricardo and Lassalle. He shows that in the early part of the period covered there was a widespread belief that efforts should be made to keep wages as low as possible. It was claimed that low wages tended to lower production costs. Moreover, poverty was considered to be the most dependable stimulus to diligence; while high wages were condemned as a cause of indolence and a danger to the nation. Mandeville voiced the thought of his day when he said that national wealth consisted in "a multitude of laborious poor" (p. 5). Gradually this idea of the desirability of low wages gave way to a belief in the tendency of wages to fluctuate around a subsistence level. Thus to Ricardo a subsistence rate of wages appeared to be a natural rate.

All the writers assumed that wages were fixed by competition. In this connection the Physiocrats emphasized the part played by labor migration. The English Classicals developed a theory of supply and demand in which natural increase of the labor supply was stressed; and with this shift of emphasis the pressure upon wages took on a much more formidable aspect. In formulating his theory of wages, however, Ricardo drew more freely from Smith than from Malthus. As for Lassalle, he was concerned with the political implications of the law of wages; but perhaps his chief contribution consisted in giving it a new name. Having been termed the "cruel and iron law of wages" it was only to be expected that it should attract wide attention and arouse bitter controversy.

This book has merit as an example of careful economic analysis. It portrays the evolution of an important part of classical economic doctrine, and gives a good summary of the developments which led to the definite linking up of wage theory with the law of diminishing returns from land and the Malthusian theory of population.

J. E. MOFFAT

Economic History and Geography

Government and Economic Life: Development and Current Issues of American Public Policy. Vol. I. By LEVERETT S. LYON, MYRON W. WATKINS and VICTOR ABRAMSON. (Washington: Brookings Institution. 1939. Pp. vi, 519. $3.00.)

It is impossible even to essay a definitive review of this book since it is the first of two separately published volumes designed to complement each other in providing an analysis of "the relationship of government to economic life as a whole in terms of fundamental economic and social func-

tions and fundamental governmental activities." This first volume is addressed to governmental implementation and regulation of private enterprise generally; and the second, soon to be off the press, deals "with those segments of economic life and those occasions in which governmental action has taken special forms or gone over into direct governmental production."

While the authors have apparently found what they regard as a clear-cut dividing line between the subject matter of the two volumes, it is not sufficiently self-evident to permit a confident appraisal of the first volume without having the second volume at hand. For example, your reviewer was prepared to note critically that for some mysterious reason the authors had omitted a discussion of the tariff from their first general volume when a conversation with two of the authors—the Messrs. Lyon and Abramson—disclosed that they regard the tariff as providing a case of special treatment of private enterprise, and have included the discussion of it in their second volume as something akin to the special treatment accorded transportation, agriculture and the bituminous coal industry. This arrangement seems debatable but the debate must remain bootless until the whole work is available.

In addition to disposing of my puzzlement about the omission of the tariff from volume I, my conversation with the authors also eliminated most of the other critical points I had set down as the framework of a review. I had remarked that the volume is notably short on simple and lucid explanation of the whyfor of many of the governmental relations to economic life with which it deals; but, in the light of the authors' conversational indication that they were directing the book to an economically sophisticated audience, this observation may become largely irrelevant. Likewise, it may well not be necessary to humor such an audience by using an entertaining literary style—a very difficult thing for a joint authorship to do—but I could not see why the book should be quite so completely dehydrated in this regard.

However, the fact that the book was designed for relatively expert rather than popular consumption raises a question, properly to be considered only when both volumes are available, as to whether or not it fails to make a contribution to expert enlightenment worthy of the effort it embodies while sacrificing the opportunity to relieve directly popular ignorance in the field which it traverses. In attempting to analyze no less than "the relationship of government to economic life as a whole" in two volumes, even fairly fat volumes, the analysis must necessarily be spread so thin relatively that the possibility of broadening the range of expert knowledge and understanding is therefore limited. The authors also do not seek by argument to broaden the range of conviction about what should be done to solve the

problems they discuss, but merely outline dispassionately "current trends and frontier issues."

Whatever the verdict on the scientific value of the study as a whole it will not alter the fact that along with much conventional retelling of time-worn stories there are considerable segments of the first volume which bring important developments up to date or assemble old material in new and suggestive ways. For example, a series of chapters on governmental dealings with cases of concerted action among workers constitute a particularly trenchant and timely contribution to this tortured field. Also, a discussion of standards, research and the collection and dissemination of information as a phase of governmental implementation of private enterprise assembles materials which I expect many members of the economists' craft will find novel. While the field is not one in which I have technical competence, I am told by colleagues who have such competence that the discussion of "A monetary mechanism," treated (I understand by Charles O. Hardy for the most part) as one of the instrumentalities by which the government implements private enterprise generally, is a singularly well rounded job.

Of course, only a battery of reviewers equipped with a range of knowledge and competence as broad as that of its battery of authors is capable of coming to close critical grips with all parts of this book. In general, I envisage only one serious complaint about the book from the craft of professional economists and this from the teaching wing on jurisdictional grounds. They may feel that the Brookings Institution ought to work its research side of the street and not invade the college textbook field, traditionally an academic preserve, as completely as it has in this case. Perhaps, however, such complaint will be stilled by the fact that the book leaves ample room for more detailed and more fully explanatory studies of all of the phases of governmental relations to economic life which it discusses. At any rate, I understand no jurisdictional complaint has been made thus far. In fact it seems that the book is being used as a backbone book for college courses on its general subject matter, and well it might.

DEXTER M. KEEZER

Reed College

An Introduction to World Economic History since the Great War. By J. P. DAY. (London and New York: Macmillan. 1939. Pp. xi, 161. $1.15.)

"This book," the preface announces, "is an attempt to give such students [born since 1918], in the briefest possible form, some explanation of the economic damage caused by the Great War and of the subsequent progress towards recovery." The author anticipates the obvious charge that he has

attempted too much within the compass of 161 small pages by stating that the work is intended merely as an introduction to an outline of the subject.

The Great War destroyed economic stability through upsetting the approximate economic equilibrium upon which it was based. In addition to a host of maladjustments, that great catastrophe left the world legacies of debt, distrust, and fear. The fall in prices between 1920 and 1922 seriously worsened an already bad situation through practically doubling debts. The inevitable depreciation of currencies which followed, plus reduced costs attributable to the rationalization of industry, and the development of new industries resulting from new inventions brought a substantial degree of recovery. The failure of the 1927 Geneva Conference to achieve freer trade, marks a turning point in economic history since the war.

The 1929 crash, the resultant economic nationalism, the cessation of United States loans to Europe, the 1931 credit crisis, the Japanese invasion of Manchuria, the collapse of the Lausanne Agreement, and the banking crisis in the United States ushered in the world's greatest depression. The second period of currency devaluations, extending from 1931 to 1936, brought some relief, but the measure of recovery was less substantial than it would have been had devaluation been accompanied by a return to the gold standard and not handicapped by political tension abroad and a feeling of uneasiness engendered in the United States by the economic program of its government.

Professor Day poses his own conundrum in the following words: "Not until there is political stability can there be economic stability, and not before economic stability can there be a restoration of an international standard of value, the lack of which bears so much responsibility for the hampering of human effort at supplying human needs" (p. 149). Apparently the stabilizer cannot stabilize until the instability caused by its absence is remedied! And he is reluctant to accept intervention in the place of reliance on the forces of the market which have produced the chaos resulting in the intervention he distrusts. An outline of either economic history since the war or of the theory underlying that development seems a heavy task for such a short work. To attempt both is to achieve neither. Fortunately Professor Day confines his theoretical discussions to a page or two and so saves his history from complete superficiality. Even so, an outline of the soviet experiment relegated to the appendix and devoting one and one-half pages to the period of war communism, one and one-third pages to that of the New Economic Policy, and four and one-half to that of the Planned Economy seems hardly understandable except on the basis of justifying the title of the work. Surely it would have been better to change the title.

Despite these flaws, the book is of value for the elementary student

for whom it is obviously intended. It is well and simply written, terse, and to the point. The problems stand clearly delineated against their historical background. Even if its theoretical digressions raise more questions than they attempt to answer, it is at least a good introduction to a study of world economic history since the war.

LORNE T. MORGAN

University of Toronto

Casebook in American Business History. By N. S. B. GRAS and HENRIETTA M. LARSON. (New York: Crofts. 1939. Pp. viii, 765. $5.00.)

In this book the authors present forty-three cases in business history, taken from the period beginning in the latter sixteenth century and ending in 1939. The majority of the cases deal with the life histories of business-men and of business enterprises. A few deal with general business developments and economic trends.

The organization and development of the materials differ somewhat from case to case, but chronological development is stressed in all. Some cases are long, others comparatively short. Some are developed mainly in the authors' own words, others are made up in greater measure of well selected quotations from primary and secondary sources. In a number of cases, much valuable new information, taken from heretofore unpublished materials—business records, account books, correspondence, etc.—is presented.

The objective is to give the reader insight into the actual workings of business enterprises that are typical of the important periods in the development of economic society. Emphasis throughout is definitely placed upon business policy and business management and the decisions of business-men in pursuit of profit. The concluding section of the book (chapters 37 to 43) departs somewhat from this emphasis by taking up secular trends in business conditions. But even here the interrelationships between general economic developments and changes in the size, forms, and policies of business enterprises are stressed.

Thirty-eight of the forty-three cases or problems are drawn from American experience. The subjects range from the better known business concerns and individuals such as J. Pierpont Morgan; E. H. Gary and the United States Steel Corporation; the New York Stock Exchange; the Second Bank of the United States; John Jacob Astor; and Cornelius Vanderbilt, to individuals and firms about which little has heretofore been published, such as the First National Bank of Boston and the First National Bank of New York; the Mutual and Equitable Life Insurance Companies; John P. Cushing (an investor, 1828-1862); Thomas Willing and Company (early marine underwriters); William Duer (contractor and speculator, 1747-1799); Cincinnati Southern Railway; and N. W. Ayer and

Son (advertising agency, 1869-1939). To supplement this rich variety of experience at home, the authors have added five cases selected from European business history because of their "unique contributions." They concern Sir Thomas Smythe and the Virginia Company; Boulton and Watt; Josiah Wedgewood; John Law, and Hugo Stinnes.

The organization of the book is designed to give the reader a sense of perspective. This is accomplished by classifying the cases under the forms of capitalism they represent: Mercantile Capitalism (7 cases, 87 pages) Industrial Capitalism (23 cases, 360 pages) and Financial Capitalism (8 cases, 144 pages). A short chapter on National Capitalism deals very briefly, and in a general way, with recent economic systems such as fascism and nazism abroad, and developments such as the New Era and New Deal at home. There are no cases dealing exclusively with the earliest form of business—petty capitalism—although recognition is made of the importance of the petty capitalist (the shopkeeper and the storekeeper) in a brief introductory section describing the essential features of each of the different types of capitalism.

Those who have read the companion book *Business and Capitalism* (Crofts, 1939) by the senior author are familiar with his point of view and his contribution to our understanding of the development of private capitalism. The more detailed treatment of specific instances in the *Casebook* fits neatly into the framework provided by the more general book, and the two can be profitably read and used together.

The authors state that the *Casebook* is designed primarily for use in courses in business history where the "case method" of instruction is used. Helpful suggestions for the use of the cases, and a complete outline of a course in business history, with specific assignments, are provided in an introductory chapter. As a further aid to study, a list of suggested readings and one of suggested questions are appended to each case. Analysis and insight into the "various possible choices of action and the implications thereof" rather than mere fact-accumulation are emphasized. The book has no index but this does not detract seriously from its usability.

It is next to impossible to describe the scope and content of these interesting case histories in a brief review. They cover various branches of manufacturing, trade, commercial banking, investment banking, security exchanges, shipping, advertising, and railroads, in varying length and emphasis. The treatment is generally objective and scholarly, the cases being used as devices for studying business and economic problems rather than as instruments for assessing moral blame or praise, although ethical considerations are sometimes mentioned.

Those who are interested in decisions of business-men in the past as a possible guide to understanding business problems of the present will find this pioneer work valuable, perhaps indispensable. But its importance is

by no means limited to its vocational usefulness. Those not primarily interested in business history as such will find in these 765 pages a most valuable reference work, containing a mine of information on the social and economic aspects of private enterprise. All readers will be better able to understand the problems of our times—depression, bankruptcy, war economics, disequilibrium, social upheaval, speculative booms, money scarcity, reflation, and insecurity—for they will meet them again and again in these chronicles of the lives and times of business-men and institutions.

CHELCIE C. BOSLAND

Brown University

Guatemala: Past and Present. By CHESTER LLOYD JONES. (Minneapolis: Univ. of Minnesota Press. 1940. Pp. xii, 420. $5.00.)

This study represents a substantial contribution by one who has already done pioneering work in Central America and the Caribbean. Professor Jones has found it advisable to divide his exposition into three parts concerning Guatemalan political development, economic advance, and social life, respectively. In each of these parts the story is unfolded from the time of the conquest to the present day. Furthermore, separate chapters on some of the functional topics (*e.g.*, land, currency, public services, population) carry the treatment from the beginning to the end.

Guatemalans have endured forced labor in one form or another right from the time of the conquest; and the institution is traced through the *encomienda,* the New Laws of 1542, the *mandamiento,* and the more recent vagrancy laws. As for land, the republic's chief problem has been to get the public domain under cultivation. Ownership by foreigners has tended to increase, but such appropriation has not become an issue as in Mexico. In foreign trade, we see a progressive change in monoculture which reminds us of Brazilian history: at first gold was the chief export; then cacao, indigo, and cochineal followed successively; later, the dyestuffs were replaced by coffee and bananas, which add up to ninety per cent of present exports. Guatemala has long shared her neighbors' difficulties in meeting the service on foreign loans; but she has been exceptionally fortunate in securing reductions since the world depression. A remarkable feature of her currency experience is a banknote inflation (geared to the public debt) which grew progressively more acute between 1897 and 1925 and subsided only when the paper was retired by conversion to a new coin (the quetzal) at a ratio of sixty to one. In this connection, it may be questioned whether the author has given sufficient attention to the banking history, particularly the individuals and firms connected therewith. Indeed, his treatment of the personal element in the economic and social sections of the book falls considerably short of that in the political part.

The last chapter ("If I were dictator") contains the therapy required by

the diagnosis. The situation, by no means confined to Guatemala, has always been handled by dictators and the reasons therefor are ably stated (see also chapter 9); furthermore, the outlook for democracy in the near future cannot be considered bright among a people characterized by an average net income of $32.00 per year, a rate of illiteracy which came to 86.82 per cent in 1921 and was increasing in some departments, and a proportion of whites amounting to less than one per cent. Briefly, Professor Jones looks for a benevolent dictator who would (1) keep order; (2) develop the transportation facilities—a most difficult problem in the highlands, to which settlement has been confined by climate and disease; (3) build an efficient public health service; (4) introduce an educational system; and (5) find ways and means to diversify agricultural production, which is expected to remain the backbone of national subsistence. The dictator, it is hoped, would retire at the accomplishment of his program, since conditions favorable to the maintenance of democracy would have arrived.

The photographs and statistical maps are valuable accessories to a straightforward—almost too sober—text, which is also accompanied by careful documentation and a thorough bibliography.

THOMAS S. BERRY

Duke University

American Policy in the Far East: 1931-1940. By T. A. BISSON. *The Existing Legal Situation as It Relates to the Conflict in the Far East.* By QUINCY WRIGHT. *German Interests and Policies in the Far East.* By KURT BLOCH. *Australia's Interests and Policies in the Far East.* By JACK SHEPHERD. *New Zealand's Interests and Policies in the Far East.* By IAN F. G. MILNER. *Japanese Industry: Its Recent Development and Present Condition.* By G. C. ALLEN. *The Problem of Japanese Trade Expansion in the Post-War Situation.* By MIRIAM S. FARLEY. (New York: Inst. of Pacific Relations. 1939. Pp. x, 146; vii, 129; xii, 75; xii, 212; ix, 131; x, 124; x, 93. $1.25; $1.00; $.75; $1.75; $1.00; $1.00; $.75.)

These seven Institute of Pacific Relations Inquiry reports, varying in length from seventy-five to two hundred twelve pages, provide a useful summary and critique of some of the major international problems of the Pacific and the Far East. Mr. Bisson, whose emphasis is primarily political, outlines the main facts and trends of American diplomacy in the Far East since 1931, supplementing his text with a selection from the Department of State's *Press Releases* of the more important documents relating to Far Eastern affairs. In equally brief compass Mr. Wright surveys the tangle of treaty rights and the wreckage of covenants in the path of Japanese imperialism. The three reports dealing with Germany, Aus-

tralia and New Zealand, as may be inferred from the word "interests" in their titles, have more to say concerning economic matters, while these are the chief concern of the remaining two on Japanese industry and trade.

With many full and excellent statistical tables, Mr. Bloch describes the none-too-secure economic foundation of the German-Japanese political collaboration that ended with the demise of the anti-Comintern Pact. Until the World War, Germany's trade with China had been of greater importance than her trade with Japan, and her financial interest in the exploitation of China had led her into sharp competition with Japan. After the war, these relationships had tended somewhat to reassert themselves. Up to and during the first year of the present Sino-Japanese War, German industry, banking, shipping and commerce retained a solicitous interest in China that was not offset by Japan's larger importations of German products. This interest was no doubt enhanced by the importance to Germany of the Netherlands Indies, a source of raw materials which stood in some jeopardy from Japan. Hence German sales of munitions to China and the German tutelage of the Chinese army that persisted even after the Berlin-Tokyo *mariage de convenance*. Though Mr. Bloch does not predict what will happen when peace permits a full resumption of the German economic activities analyzed in his report, he suggests in his preface that Germany's historic interest in China may be stimulated anew by the twin currents of Soviet-Chinese and Soviet-German political friendship.

The reports on Britain's two Pacific Dominions show that they view the Far East through different eyes than the Great Powers of Europe and the United States. To the latter, as Mr. Shepherd observes, "the 'Far East' is geographically remote, but for the small Pacific countries, it is very close at hand. Economically, the Great Western Powers think of the whole Far East as a field for investment, they think of China as a market for their manufactured goods, and they have come to think of Japan in recent years as a dangerous competitor in the markets of the world. The small Pacific countries, on the other hand, are themselves fields for investment and have no significant financial stake in Eastern Asia; they look upon the Far East as an important market, but for foodstuffs and raw materials rather than for the products of secondary industry; and Japan for them is a useful supplier of cheap manufactured goods instead of a dangerous competitor." Add to these considerations the life-and-death importance of national security to the virtually undefended countries thus situated, and you have the clue to the complicated nexus of British imperial, dominion, and Japanese economic and political relations analyzed in considerable detail by Messrs. Shepherd and Milner.

It is, however, the works of Mr. Allen and Miss Farley which should hold the greatest interest to readers of the *American Economic Review*. Moreover, it is these which, in the opinion of the reviewer, make the most

valuable contribution to our study of Far Eastern and Pacific affairs. For of all the gaps in our knowledge of the field, that which should be filled by scholarly analysis of its economics is surely the greatest. This is especially true of Japan's economy, which has been the subject of more wishful predictions of doom than it has of sober, realistic appraisal. The latter is ably supplied by Mr. Allen and Miss Farley whose memoranda, replete with statistics, throw much light upon Japan's waning but as yet considerable economic strength.

A. WHITNEY GRISWOLD

Yale University

Colbert and a Century of French Mercantilism. By CHARLES WOOLSEY COLE. Vols. I and II. (New York: Columbia Univ. Press. 1939. Pp. xii, 532; 675. $10.00, the set.)

From 1582, when Laffemas became Henry of Navarre's *valet de chambre,* to 1683, the year Colbert died, there was enunciated in France a very ordinary brand of economic thought that provided justification for a most extraordinary variety of governmental activity. All of which is less paradoxical than it seems: the economic doctrines were mostly vestigial, localistic ideals; the heroic governmental activity represented attempts to realize these ideals on a nation-wide scale. Four-fifths of this "century of French mercantilism" might properly be called a period of preparation for twenty-two years of intense effort to stimulate French commerce and industry. This intense effort occurred during the ministry of Jean-Baptiste Colbert and was, to a large extent, a personal achievement.

To a meticulous analysis of this century of economic policy Professor Cole has devoted 1,090 pages (not counting appendices), 25 per cent of the total space to the 79 years from 1582 to 1661, 75 per cent to those amazing, project-sprouting years (1661-82) when Colbert was Louis XIV's chief minister. Although the 277 pages dealing with the pre-Colbertine age suffer considerably from repetition, prolixity and unnecessary detail, they show clearly the penchant of Colbert's forerunners for sea power, foreign trade, and manufacturing. For the most part, however, the kind of economic planning which Colbert attempted to institute after 1661 found expression during the pre-Colbertine era more often in pamphlets than in actuality. Quite properly, then, Professor Cole sets about to trace the evolution of economic ideas from Laffemas to Colbert. He does it cautiously and literally; in turn the writings of every eligible predecessor of Colbert (*e.g.*, Laffemas, Monchrétien, Eon) are catalogued, without much attempt to appraise them in terms of appropriate criteria. I assume Professor Cole has deliberately chosen this procedure rather than the synoptical methodology employed, for example, by Professor Heckscher in dealing with mercantilist ideology. At any rate, no critical rubrics disturb Cole's chronology;

one after another the writers pass in review, repeating old dogmas, adding new items to a creed of economic policy. Cole calls this enfolding creed "economic theory"; but as far as I can see the pre-Colbertine economic literature is a mosaic of economic policies, not economic theory in any genuine sense.

The real substance of Cole's work is the Colbertine era, that incredible chapter in economic history, nothing in any way comparable, Cole argues (II, 362) before the Russian five-year plan. In richness of detail, and in completeness of coverage, Cole has superseded all previous studies of Colbert's many-sided attempt to make France the leading industrial and commercial nation of Europe. Manuscript sources have been ransacked, printed materials searched, secondary accounts appraised critically. Each and all of the foreign-trade ventures have been explained, all of the industrial projects. The regulative aspects of Colbert's bureaucracy have received the same assiduous attention; Cole's detailed exposition of local regulations, for example, corrects the over-simplification in Heckscher's account of French industrial regulations. In Cole's work will be found the whole story so far as documentary evidence reveals the whole story. Here is an account of Colbert's hopes and achievements, a record of state subsidies to dozens and dozens of ventures; here is the story of new monopolies running afoul of vested interests and administrative inexperience, of diplomats turned labor scouts; here we see Colbert distributing blooded stallions, "flexing" the tariff, shutting up the poor in industrial *hôpitaux,* or writing his voluminous letters to the inspectors of manufactures. Like Rabelais' Friar John, Colbert was everywhere, driving his personnel; a master diplomat, a master disciplinarian, never idle, never satisfied!

Yet, much as I admire the completeness of Cole's realistic survey of Colbert's industrial and commercial experiments, I cannot but regret that so many interpretative and analytical opportunities have slipped by unnoticed. There were basic reasons why Colbert's lavish subventions did not fertilize French industrial development; there were basic differences between French and British entrepreneurial practices which Cole does not signalize, differences which go far toward explaining the chronic laggardness of French enterprise. With visions of a monumental work on Colbert, Cole was too preoccupied with laying all the minutiae of evidence before his readers. Why detail the week by week progress of company negotiations (II, 159-170) or the exact procedure whereby Auxerre established a poorhouse (II, 486) and leave much more important issues untouched?

There is nowhere any adequate analysis of the reactionary theory of business enterprise which lay behind Colbert's ventures and Colbert's regulative measures. The very best statistical evidence of the fruitional consequence of Colbert's efforts has been relegated to an appendix. There is repeated criticism of Colbert's belief in a "static economy" but no attempt

to analyze the demand inelasticities which partially justified this interpretation. All the evidence about the iron and steel industry occupies only one and a half pages but its paucity calls forth no comment. In a century of French mercantilist thought which Cole describes, the monetary literature is virtually untouched. There is no intimation that the foreign-trade policy of France often amounted to a subtle kind of dumping.

I have a feeling that Cole has been over-zealous in detailing evidence and for that reason he has failed to ask enough questions about his materials. He hazards no generalizations, except of a recapitulative nature. I wish Professor Cole could now be persuaded to write a smaller, more succinct, more quantitative, more critical book on Colbert. I cannot help thinking that this would be the way to make his years of research genuinely useful.

E. A. J. JOHNSON

New York University

NEW BOOKS

BAKKEN, H. H. *Coöperation to the Finnish.* (Madison, Wis.: Mimir. 1939. Pp. x, 220. $2.50.)

BRUNK, J. W. and FRANKLIN, H., editors. *Brazil yearbook and manual, 1940.* (New York: Brazil Yearbook. 1940. Pp. 352. $3.75.)

BURKY, C., DE LA HARPE, J. and WACKERNAGEL, J. *La Suisse et l'autarcie.* (Paris: Inst. Internat. de Coöp. Intellectuelle. 1939. Pp. 164.)

In this volume three Swiss university professors examine, in separate essays, the principles and practices of autarchy in relation to the problems and organization of the Swiss social economy.

The first essay, by Professor de la Harpe of the University of Neuchatel, is a general discussion of autarchy including its historical derivation. He develops the argument that autarchy is not merely a phenomenon having as its goal the self-sufficiency of the economy, but that it also manifests itself in other social spheres as mystical racism, political nationalism, etc. In discussing the causes of autarchy, de la Harpe offers the suggestion that it might be a twentieth century reaction to the economic, political, and social liberalism of the nineteenth century. Such a cyclical or "action-reaction" type of philosophy of history, in the opinion of the reviewer, over-simplifies any analysis of historical change.

The two other essays of the volume deal more directly with the economics of autarchy and especially Swiss autarchy. Obviously for Switzerland self-sufficiency is impossible. Her natural resources are extremely scarce, the greatest of them being, perhaps, the industrial skill of her population and a fairly abundant hydro-electric supply. Consequently, autarchical measures for Switzerland consist in what might be simply called protective tariff, trade and monetary measures. Both Professor Burky of the University of Geneva and Professor Wackernagel of the University of Basel agree on this. Both also agree that even totalitarian Italy and Germany, lands with a greater variety of resources than Switzerland, have never seriously followed a policy directed to *complete* national self-sufficiency.

The major difference between Burky and Wackernagel seems to be in the evaluation, from the point of view of social desirability, of a protective or

autarchical policy. The former offers what might be considered an *apologia* for Swiss post-war economic policy; the latter offers what might be considered a spirited justification of it. Wackernagel's justification is based on broader grounds than mere expediency. Both are in approximate agreement in their analyses of the economic factors which forced Switzerland to establish quota systems in international trade, to devalue in 1936, to subsidize agriculture, etc. They disagree primarily in the long run with the social desirability of a restrictive policy as compared with a free trade, liberal policy. To one who is not sympathetic with either the narrow economic, or broader social principles of autarchy, it seems as if Wackernagel has made necessity a virtue in Swiss social policy.

SIDNEY C. SUFRIN

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COLBY, C. C. and FOSTER, A. *Economic geography: industries and resources of the commercial world.* (Boston: Ginn. 1940. Pp. 719. $1.92.)

FRANK, T. *An economic survey of ancient Rome.* Vol. V. *Rome and Italy of the Empire.* (Baltimore: Johns Hopkins Press. 1940. Pp. xvi, 445.)

FREUND, M. K. *Jewish merchants in colonial America: their achievements and their contributions to the development of America.* (New York: Behrman's Jewish Book House. 1939. Pp. 128. $1.50.)

GÜLICH, W. *Die Bibliothek des Instituts für Weltwirtschaft: Voraussetzungen und Grundlagen weltwirtschaftlicher Forschung.* (Jena: Fischer. 1939. Pp. 87.)

HANKE, L. and D'EÇA, R., editors. *Handbook of Latin American studies: 1938. A selective guide to the material published in 1938 on anthropology, archives, art, economics, education, folklore, geography, government, history, international relations, law, language and literature and libraries.* (Cambridge: Harvard Univ. Press. 1939. Pp. xvi, 468.)

Pages 76-150 are devoted to economics. Max Handman furnishes the titles and annotations on Brazil; D. M. Phelps on the remainder of South America; and Chester Lloyd Jones on the Caribbean area.

HEISS, F., editor. *Deutschland und der Korridor.* (Berlin: Volk und Reich Verlag. 1939. Pp. 311.)

Contains many maps and illustrations.

HERRING, J. W. *Trails to the new America.* (New York: Harper. 1940. Pp. viii, 160. $2.)

HERSKOVITS, M. J. *The economic life of primitive peoples.* (New York: Knopf. 1940. Pp. xii, 492, xxviii. $4.50.)

HOFFMANN, W. *Wachstum und Wachstumsformen der englischen Industriewirtschaft von 1700 bis zur Gegenwart.* Probleme der Weltwirtschaft 63. (Jena: Fischer. 1940. Pp. x, 284. RM. 16.)

ILLYEFALVI, L. I. *Statistisches Jahrbuch der Haupt- und Residenzstadt Budapest.* XXVI Jahrg. (Budapest: Kommunal-Statistisches Amt. 1938. Pp. xii, 580. 15 Pengö.)

JENNINGS, M. *A pioneer merchant of St. Louis, 1810-1820: the business career of Christian Wilt.* (New York: Columbia Univ. Press. 1939. Pp. 219. $2.50.)

To use the words of the author, the purpose of this study is to show "the rôle played by the business-man in the growth and development of pioneer life." The activities of Christian Wilt, a pioneer merchant of St. Louis in the years from 1810 to 1820, were taken as an illustration of the varied enterprises of this type of man. Successful persons of the mercantile class were

leaders in the community. They were not only merchants, but often manufacturers, promoters of means of transportation, developers of natural resources, and sometimes money lenders. In addition, the community looked to them for civic leadership. Thus, they were often involved in politics, in military affairs, and they were usually the promoters of local cultural activities. Versatility seems to have been one of their leading traits. Occasional misfortune was not regarded as a handicap, but only as a challenge to try again, perhaps at something else. Of such characteristics was Christian Wilt.

Naturally, a study of this description involves excursions into such activities as manufacturing, merchandising, transportation, credit methods, labor conditions, wages and prices. Also it leads to a study of the cultural aims and values of a community. With respect to Sister Jennings' study, these matters are treated primarily from the point of view of enterprise at St. Louis. But here and there in the volume one gets a glimpse of the interlacing of various local interests with those of other communities near and far. The author has had access to material which is not usually available to students of history. The work is thoroughly documented.

I. LIPPINCOTT

KNOOP, D. and JONES, G. P. *The Scottish mason and the mason word.* (Manchester: Manchester Univ. Press. 1939. Pp. x, 114. 7s. 6d.)

The use of stone as a building material began at least as early as 1288 when Stirling Castle was begun, but stone buildings were not very common in Scotland until the fifteenth century. There is little evidence of formal organization among masons until the sixteenth century, when it became common to require that masons be freemen of the towns in which they work. At the close of the century the organization of working masons was considerably extended by the establishment of territorial lodges and the development of rules to permit masons to work in areas outside their own lodge. The new organization had two functions: the exclusion of unauthorized workers, and the opening of a wide territorial area to all authorized masons. An unauthorized worker was called a "cowan" or "lewis." The term "cowan" was used originally to describe a worker who laid dry stone walls. This meaning survived, but during the sixteenth century the term was used to include persons who worked with mortar without having served an apprenticeship, or without qualifying as an apprenticed mason. The earliest statutes describing this new organization are the Schaw Statutes of 1598 and 1599. References in charters of 1601 and 1628 afford evidence of the territorial relationships among the lodges, and the Falkland Statutes of 1636 provide for all the contingencies arising out of the new arrangements. Increased mobility and the policy of excluding "cowans" made it desirable to have means of identifying accepted masons, but we have no means of dating with precision the introduction of the "Mason Word." The earliest records of the actual ceremonial of admission are to be found in the constitutions of 1696 and 1700.

ABBOTT PAYSON USHER

KÖNIG, E. *Die Sozialpolitik in Palästina, mit besonderer Berücksichtigung des gewerblichen Arbeiterschutzes.* (Zürich: Polygraphischer Verlag A.-G. 1939. Pp. 279. Fr. 9.)

Besides the modest achievements of the British mandatory power in Palestine, mostly in the field of public works, the rôle of political and economic bodies of private character has been more important. The Zionist Organiza-

tion, the Jewish Agency (both organs of world Jewry), the Jewish National Council (a self-government of the Jewish community in Palestine), trade-unions of the General Federation of Labor and religious workmen's organizations contribute to the development of the social situation of the wage-laborer in the Holy Land. Owing to national contrasts between Arabs and Jews, as well as differences between the rather radical zionist movement and conservative English high-commissioners, this collaboration of coöperative and governmental groups alone can, in the opinion of the author, overcome these obstacles to a solution of Palestine's complex labor problems.

PAUL UCKER

KONOVALOV, S., editor. *Results of the Second Five-Year Plan and the project of the Third Five-Year Plan.* Memorandum no. 12. (Birmingham, England: Univ. of Birmingham Bur. of Res. on Russian Econ. Cond. 1939. Pp. 21. 2 sh.)

This memorandum prepared by the Birmingham Bureau in collaboration with prominent Russian emigré-economists, Baykov and Prokopovich, summarizes from soviet sources the development of soviet industry, agriculture and railway transport since 1928. A careful reference, with short critical remarks, is made to sources used for all data presented in the statistical summary. In the appendix appear the population statistics from the two censuses of 1926 and 1939.

PAUL HAENSEL

MCCARTY, H. H. *The geographic basis of American economic life.* (New York: Harper. 1940. Pp. xxiii, 702. $3.75.)

A useful text in economic geography. The United States is divided into ten major regions which have distinct types of economic development. Where possible the volume of production is measured as income produced; elsewhere by the relative number of persons gainfully employed in various occupational groups. The text is supplemented by references and nearly 100 charts and maps.

MADDOX, W. P. *European plans for world order.* James-Patten-Rowe pamph. ser. no. 8. (Philadelphia: Am. Acad. of Pol. and Soc. Science. 1940. Pp. 44. 15c.)

PHELPS, D. M., editor. *Economic relations with Latin America.* Proc. of conference held as part of the Inst. of Latin American Studies, Ann Arbor, August 11-12, 1939, under joint auspices Committee on Latin Am. Stud., Am. Council of Learned Soc., and Univ. of Michigan. Michigan bus. papers no. 6. (Ann Arbor: Univ. of Michigan Bur. of Bus. Res. 1940. Pp. 75. $1.)

RICCI, U. *La politica annonaria dell' Italia durante la grande guerra.* Biblioteca di Cultura Moderna n. 344. (Bari: Gius. Laterza. 1939. Pp. 363. L. 25.)

ROBERT, P. *La politique d'isolement économique: le problème pour la France.* (Paris: Domat-Montchrestien. 1940. Pp. 98.)

In the first two-thirds of this short brochure the author sketches the economic, financial, and political causes of the surge toward economic isolation since the first World War, the means of achieving this isolation, and the consequences of a policy of self-sufficiency. The last third examines various possible economic policies for France. Unrestricted free trade is rejected. Autarchy of the French empire is impracticable: the empire is self-sufficient in foodstuffs, but almost completely dependent on the outside world for such vital raw

materials as cotton, oil, copper and mercury. The author suggests a combination of empire preference and moderate protectionism as a desirable policy for France.

W. F. STOLPER

ROSENSTOCK-FRANCK, L. R. *Les étapes de l'économie fasciste italienne: du corporatisme à l'économie de guerre.* (Paris: Lib. Soc. et Econ. 1939. Pp. 281. 30 fr.)

This volume is a sequel to the excellent study of the fascist syndical and corporate system which Mr. Rosenstock-Franck published six years ago under the title *L'Economie Corporative Fasciste en Doctrine et en Fait* (Paris, 1934). A comprehensive critical analysis of that system led Mr. Franck to the conclusion that its major weakness lay in the lack of freedom of its members, a defect which made of it little more than a convenient tool used by the fascist regime for the furtherance of its political ends.

In the present volume these ends and the means used to achieve them are further explored. During the last six years, Mr. Franck points out, the goal of fascist economic organization and policy has shifted from what he calls "the illusion of corporatism" to" the realities of a war economy." The ultimate goal of present-day fascist economic policy is, clearly, the achievement "within the shortest possible time of a maximum of economic independence and of military power." The bulk of Mr. Franck's volume is devoted to an analysis of the means through which the achievement of these goals is sought. There are informative chapters on the new system of credit control and bank supervision established in Italy in 1936, on the present rigid control of foreign trade and of the foreign exchanges, on the control of domestic prices, on the government's elaborate plans for the achievement of economic self-sufficiency. There is, furthermore, an illuminating discussion of the rôle which the syndical and corporate system is called upon to play in the government's present program of economic autarchy, and a thoughtful evaluation of the broad social consequences of the turn which economic events in Italy have taken in recent years. Throughout the volume the analysis of economic policy is aptly supplemented by citations of statistical data intended to provide an appropriate factual background for the discussion.

WILLIAM G. WELK

SHOTWELL, J. T. *What Germany forgot.* (New York: Macmillan. 1940. Pp. vi, 152. $1.50.)

SMITH, J. R. *Industrial and commercial geography.* New ed. (New York: Holt. 1939. Pp. 971. $4.50.)

THOMPSON, L. *Fijian frontier.* (New York: Inst. of Pacific Relations, Am. Council. 1940. Pp. xxiii, 153. $2.)

VIANELLO, C. A. *La riforma monetaria in Lombardia nella seconda meta del '700.* Annali di Economia, vol. xiii, n. 2. (Padua: Antonio Milani. 1939. Pp. xxiv, 257.)

The treaty of Aix-la-Chapelle brought the Austrians into Milan, where they ousted the Spanish bureaucracy and introduced an era of reforms. There had been many centuries of monetary disorder, unrelieved by the coming of precious metals after discovery of America. Reform began with the efforts of the Governor Pallavicini initiated as early as 1751, and culminated in the act of 1778.

Vianello's study is not concerned primarily with the details of the reform

achieved, but much more with the steps by which it came about. There is a brief introduction, but the bulk of the volume consists of the texts of contemporary reports, proposals and comments. Mainly, these stem from the years 1766-72 and appear in chronological arrangement, except that the important Kaunitz report of 1776 is given first place of all on the ground that it briefly recapitulates the earlier discussions. In addition to the official documents a number are presented that pretend to no intrinsic interest for monetary reform but reflect the views of private persons who speak from a special background of their experience.

ROBERT F. FOERSTER

WALKER, E. R. *War-time economics, with special reference to Australia.* (Melbourne: Melbourne Univ. Press. 1939. Pp. 174. 5s.)

This thoughtful little book was written in the belief that economists could make a contribution toward solving problems of war which are primarily economic, and it reflects credit upon the profession. Besides giving a summary and evaluation of the steps taken by Australia, it poses and explains the elements of war economics in general terms. The book contains few surprises and it is over-ambitious, but to my knowledge no better survey of and introduction to the subject is available.

The exposition throughout stresses the need of thinking of war economics in "real" and not in "monetary" terms. (So do fashions change.) Idle resources will have to be brought into employment and some resources employed in civil will have to be transferred to war work. To these ends government can employ fiscal measures and direct controls. The proper fiscal policy for Australia, so the author belives, will be to lean in the early stages of war upon advances from the Commonwealth Bank, and then later, after resources have become adjusted to the new tasks, to turn to taxation and to loans. This plan the author calls "unorthodox"; but it seems to the reviewer that the designation is quite unwarranted. Direct controls are, perhaps, unorthodox and the attention given to them is a reflection of the success with which they seem to have been employed by Germany in rearmament, and of the fact that in war governmental fiat seems the quickest and most effective way to act. The government does not simply want command over resources, it wants particular types of resources; it does not wish merely to discourage private consumption, but private consumption of particular goods. Why, then, not resort to requisition and price-fixing? The difficulties which may lie along this primrose path of authoritarian war economics are not explored.

J. A. MAXWELL

WATTS, A. P. *A history of western civilization from the Reformation to the present.* Vol. II. (New York: Prentice-Hall. 1940. Pp. xvii, 1055. Trade, $5; school, $3.75.)

Brazil, 1938: a new survey of Brazilian life, economic, financial, labour and social conditions from a general point of view. (New York: Nat. Coffee Dept. of Brazil. 1939. Pp. 446.)

Extracto estadistico del Peru, 1938. (Lima: Ministerio de Hacienda y Comercio. 1939. Pp. xlvi, 644.)

Economic review of foreign countries, 1938. Bur. of Foreign and Domestic Commerce, econ. ser. no. 7. (Washington: Supt. Docs. 1939. Pp. iv, 258. 30c.)

Segundo plan sexenal, 1941-1946. (México: Partido de la Revolución Mexicana. 1939. Pp. 160.)

Statistical abstract for the British Empire for each of the ten years, 1929-1938. 68th no. (London: H. M. Stationery Office. 1939. Pp. xv, 234. $1.15.)

Agriculture, Mining, Forestry, and Fisheries

An American Exodus: A Record of Human Erosion. By DOROTHEA LANGE and PAUL S. TAYLOR. (New York: Reynal and Hitchcock. 1939. Pp. 158.)

During the past few years considerable attention has been devoted to the westward migration from the deep South and the "dust bowl" of dispossessed farm owners, tenants, and share-croppers. Mechanization of agriculture, soil depletion, loss of markets, and other factors of distress have been called to our attention. But heretofore the picture of the resultant migration of agricultural workers has been presented in sections—it has featured special phases and certain localities. Now, in this book, Lange and Taylor have given us briefly and succinctly a broad perspective of the whole situation. Like earlier westward migrations, the contemporary one is a flight from poverty. Thus it is another "American exodus." But unlike previous similar movements, this one has led to personal disillusionment and social disintegration. The product is human erosion in a form most dangerous to the fabric of our economy.

Although designed for popular reading, this book is of great significance to all economists as a convincing picture of the vast economic upheaval in American agriculture which must necessarily change our way of life as well as our economic structure. More clearly and decisively than any scholarly treatise thus far written, this simple book of text-and-pictures elucidates the economic factors underlying, characterizing, and resulting from our current agricultural revolution.

It is not "just another picture book." The remarkable photographs by Dorothea Lange (Mrs. Taylor) are an integral part of the serious argument written by Professor Taylor, who is probably the most distinguished scholar now at work on the subject. It is the product of a profound knowledge, gained by competent technique, of the current problem of migratory agricultural labor.

As a reviewer I am enthusiastic about the entire volume excepting the last chapter, entitled "Directions." I find myself in disagreement with the basic tenet of Dr. Taylor's conclusions: "It is plain that with advances in agricultural techniques the country requires fewer farmers rather than more" (p. 153). Upon this proposition he builds his concluding argument. But this assumption that we have, or can have, too many farmers is, I believe, a misstatement of the basic economic principles involved, and,

when used as a fundamental proposition, leads to further erroneous complications in economic reasoning. We have not, necessarily, too many farmers. We have too many farm products entering the markets as the latter are now constituted. The difference is greatly important.

As an economist, Dr. Taylor knows that the number of farmers is economically unimportant as such; that the extent to which those farmers devote their attention to "cash crops" is very important. In New England today, for example, there are many farmers who are living quite comfortably but who sell and buy very little in the market. Diversified farming and local barter are proving nearly adequate for decent support, thus requiring a minimum of participation in the market. It is true that the greater proportion of our arable land is not now economically suited to diversified farming; but since most of it can be more diversified than it is, this type of farming is not necessarily doomed to extinction; it may actually increase. A curtailment of the growing financial control of agriculture might well allow such an increase to come about naturally. Obviously it cannot increase to such an extent as to "solve our farm problem." However, it points the way toward the coöperative farming of which Dr. Taylor approves. It also suggests the more extreme proposition that it may become desirable to force the great corporate farms to give way to large-scale coöperative farms. That is a tremendous problem in itself, unsuitable for discussion here.

Perhaps the more important advantage of this way of re-defining the basic problem is seen in the emphasis it places on the market. To a considerable extent the problem of agricultural labor is a direct consequence of the problem of agricultural marketing. Certainly a proposal for reforming such marketing methods is more realistic in its immediacy than the solution involved in Dr. Taylor's statement that "industrial expansion alone offers hope of permanently raising agricultural income . . ." (p. 154). Such industrial expansion, it is presumed, will absorb the surplus of landless farmers. But it would be difficult to demonstrate a high correlation between industrial expansion and agricultural income, or to forecast any direct relevance. Further, this solution of Dr. Taylor, if re-written as a solution to the problem of industrial unemployment, reveals its own fallacy: We have a large body of industrial bankrupt and unemployed. These distressed individuals must therefore permanently leave the industrial labor market. Therefore, agricultural expansion alone offers hope of permanently raising industrial income. Like Dr. Taylor's solution, this begs the question. The error implicit in both programs would have been avoided through a clear recognition of the economic principles involved. The men of both farm and factory are economic units only in so far as they affect a market.

Thus it may be that we have not too many farmers at all, but that we have, in the short run, too many cash crops, and that we require, in the

long run, a basic reorganization of the producing and marketing features of our agricultural economy.

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NEW BOOKS

ADDISON, LORD. *A policy for British agriculture.* (London: Gollancz. 1939. Pp. 303. 7s. 6d.)

The author, a former Minister of Agriculture (1930-31), is an advocate of national ownership of agricultural land and presents the advantages he sees in it for the nation and the farmer. He is a critic of present programs to aid British agriculture; but his own proposals indicate that his objections are not on the grounds of controls involved. He urges the establishment of boards invested with considerable authority and recommends that there should be "a single Ministry of Agriculture and Food Supplies, and unified direction of the whole great business" (p. 280).

He holds the view that too much land is in grass instead of in its "proper" use (p. 156). He thinks land should be used more intensively, but the discussion relating to this point suggests that factors affecting the intensity of land use have received inadequate attention. Occasional references to American agriculture indicate that some popular writings have been accepted too literally. Thus, one is told (p. 35) that agricultural practices have "turned great tracts of the United States and some parts of Canada into deserts." This book is of interest as representing one type of view with respect to agricultural policy rather than as a source of results of careful research.

O. B. JESNESS

BAILEY, C. H. *Physical tests of flour quality.* Wheat studies, vol. xvi, no. 6. (Stanford University, Calif.: Food Research Inst. 1940. Pp. 243-300. $1.25.)

BAKER, G. *The county agent.* (Chicago: Univ. of Chicago Press. 1939. Pp. xxi, 226. $2.)

This excellent monograph is on the border-line between government and economics. The agricultural county agent is an example of an administrator who is responsible to and receives his pay from a multiplicity of government units. In 1936-1937, 58 per cent of his total appropriation was from the nation, 19 from the states, including state colleges, 19.6 from the counties and 2.8 from private sources. He is also of interest to the economist as a government agent concerned with the education, stimulation and now control of the decentralized farming industry. The chapter on the negro county agent is of especial interest in showing the difficulties and the working results of such a system applied to a situation of racial castes.

O. INGRAHAM

BERNHARDT, J. *Report of the chief of the Sugar Division, 1939.* (Washington: U. S. Dept. of Agric. 1939. Pp. 19.)

Summarizes the activities of the Sugar Division with respect to the administration of the Sugar act of 1937.

BRUINI, V. C., NIELSEN, J. M. D. and DEANDREIS, R. *Relevamiento geográfico de la producción argentina de granos: área de cultivo, rendimiento y variabilidad de la cosecha de cereales y lino.* Pub. no. 45. (Buenos Aires: Comisión Nacional de Granos y Elevadores. 1939. Pp. 116.)

COLVIN, E. M., compiler. *Transportation of agricultural products in the United States, 1920-June, 1939: a selected list of references relating to the various phases of railway, motor, and water carrier transportation.* Part II. *Highway, rail, and water transportation.* Agric. econ. bibliog. no. 81. (Washington: U. S. Dept. of Agric. 1939. Pp. viii, 251-565.)

DAVIS, C. S. *The cotton kingdom in Alabama.* (Auburn, Ala.: Auburn Printing Co. 1939. Pp. 241. $2.50.)

GRAS, N. S. B. *A history of agriculture in Europe and America.* 2nd ed. (New York: Crofts. 1940. Pp. xxvii, 496. $3.50.)

This edition contains a new chapter of approximately 50 pages, covering the period 1920-40. The first edition was reviewed in the *American Economic Review,* December, 1925, pages 745-746.

GREGORY, H. E. and BARNES, K. *North Pacific fisheries, with special reference to Alaska salmon.* Stud. of the Pacific no. 3. (New York: Am. Council, Inst. of Pacific Relations. 1939. Pp. xviii, 322. $2.)

Much has been written about various phases of the important fishery resources and fishery industries of the North Pacific but this is the first book to explore the field fully. Inspired by the international problems raised by the threat of alien participation in the Pacific salmon and halibut fisheries, the authors have inquired into the history, exploitation, and value of these resources in order to establish their importance in the economy of this country. National interest in these fishery resources, expressed by priority in the field, imposition of conservation measures, and establishment of vast industrial structures, is an important consideration in our current international fishery problems and is carefully analyzed in this volume.

Particular attention is given to the Alaska salmon fishery because it has been faced very recently with alien exploitation. The halibut fishery also is discussed and brief mention is made of the fisheries of British Columbia and the Pacific Coast States. The Alaska salmon industry represents an investment in plants and equipment of more than 50 million dollars and yields products having an average annual value of about 40 million dollars. In terms of investment, employment opportunity, and food supply, it far overshadows all other fishing industries of the Pacific Coast. The future of this industry would be seriously jeopardized by the operation of foreign fishing vessels off the Alaskan Coast, intercepting the salmon runs upon which our industry is dependent. The Alaska salmon fishery is fully developed, and for 15 years our nationals have been operating under restrictive regulations designed to perpetuate the fishery at a high level. Such regulation would be nullified by unrestricted alien fishing in offshore waters; and depletion with consequent industrial failure would be inevitable.

There is a brief presentation of the natural history of the Pacific salmon and the relation thereto of fishing and processing methods and conservation measures. The business structure, production, and marketing practices in the salmon industry are ably discussed, and the managerial and financial problems including operating costs, prices, and profits are analyzed.

This survey emphasizes the importance of the North Pacific fishing industry to Alaska, the Pacific Northwest and the United States. It will be of especial interest to those charged with the management of marine fishery resources, to those directly associated with the fishing industry, and to all students of economics and international law.

SETON H. THOMPSON

HENNEFRUND, H. E., compiler. *The peanut industry: a selected list of references on the economic aspects of the industry, 1920-1939,* Agric. econ. bibliog. no. 80. (Washington: U. S. Dept. of Agric. 1939. Pp. viii, 238.)

DE HEVESY, P. *World wheat planning and economic planning in general.* (New York and London: Oxford Univ. Press. 1940. Pp. xiv, 912. $12.)

HOTCHKISS, W. E., and others. *Mechanization, employment, and output per man in bituminous-coal mining.* Vols. I and II. Rep. no. E-9. (Philadelphia: WPA Nat. Res. Project. 1939. Pp. xxii, 175; 176-436.)

HUBBARD, L. E. *The economics of soviet agriculture.* (London and New York: Macmillan. 1939. Pp. xii, 316. $4.)

This is the third book which Mr. Hubbard has published on soviet economics. He is an Englishman who knows well the Russian language[1] and whose family for generations lived in Russia; he paid several visits to Russia in the last years. The new book is devoted to Russian agriculture and presents a popular, impartial and well written study. It begins with a short description of pre-war conditions and is brought up to date (June, 1939).

Mr. Hubbard is basing his study entirely on soviet statistics and official reports and skilfully criticizes them; unfortunately, he relates hardly anything from his personal observations. He concentrates all his attention on the collectivized peasantry (*kolhozy*) and says practically nothing about the state farms.

Having shown "with as little comment as possible" the progress of agriculture under the soviet rule, Mr. Hubbard gives a remarkable summary and interesting conclusions in the last two chapters. To him, the old peasant disappeared and is replaced by "a working co-partner or share-cropper with the state in an agricultural enterprise in which the state provides the capital. . . . Economically, the peasant has exchanged comparative liberty for a planned system in which personal initiative is practically excluded. . . . Actually he surrenders to the state in one way or another at least as much, if not more, of his gross products as taxes and rent absorbed under the old regime, and he has much less voice in how he shall utilize his land and how he shall dispose of its products." And finally, "the net reward of farm labor is far inferior to that of factory labor." There is a considerable surplus of labor in the villages but the soviet passport regulations prevent entering and residing of peasants in the chief industrial districts and large towns without police authorization.

This book and particularly its two last chapters should be read by all interested in soviet economics.

PAUL HAENSEL

INNIS, H. A. *The cod fisheries: the history of an international economy.* (New Haven: Yale Univ. Press. Toronto: Ryerson Press. 1940. Pp. xv, 520. $3.50.)

JASNY, N. *Competition among grains.* (Stanford University, Calif: Food Research Inst. 1940. Pp. xiii, 606. $4.)

LOOMIS, C. P. *Social relationships and institutions in seven new rural communities.* Soc. res. rep. no. xviii. (Washington: U. S. Dept. of Agric. 1940. Pp. 82.)

McCOY, J. G. *Historic sketches of the cattle trade of the West and Southwest.* Edited by RALPH P. BIEBER. (Glendale, Calif.: Arthur H. Clark Co. 1940. Pp. 435. $6.)

[1] Still one mistake in Russian was made by Mr. Hubbard on p. 165: the plural of *sveno* is *svenya,* and not *svena* (links), and I prefer the spelling: *zveno.*

MARQUIS, R. W. *Economics of private forestry.* (New York: McGraw-Hill. 1939. Pp. viii, 219. $3.)

This little book was written by an economist, who says he is not a specialist in forestry. The first half is a statement of the elementary principles of classical economics and an attempt to apply them to the business of private forestry. The second half weighs the obstacles against the incentives to the practice of forestry, glances at the rôle of government in the solution of the forestry problem and takes a hopeful look into the future. Facts are documented, and so far as I can judge the literature on the subject has been pretty well sifted.

The author maintains that the supply of forest products and the exploitation of our forest resources depends largely on private initiative. The encouragement of private enterprise rests on the probability of profits. Hence the logical appeal, indeed the only successful appeal, to forest owners to plant trees and engage in better forestry practices is the favorable balance sheet. If private owners can be shown that good management, careful cutting, honest and complete accounting and shrewd marketing will assure a paying enterprise, plans for the conservation of our forests will succeed (if the government coöperates by providing educational assistance and fire protection and refrains from over-taxation and market competition). In short, before we can expect private owners to risk their capital in a permanent or even a fifty-year enterprise, they must be convinced that good forestry pays.

Furthermore, the author is convinced that a "sustained yield" or continuous cropping program offers more social advantages and greater assurance of profits than a "period" cutting or "liquidation" program, though good forestry management may, under certain conditions, favor the latter.

One may, however, call attention to the fact that continuous cropping enterprise large enough to support a saw mill and necessary equipment, requires a considerable investment, entails a large operating expense and probably assumes managerial ability above the average. The thousands of owners of small tracts are unable to undertake a lumbering enterprise unless it is possible to organize coöperative forestry groups in favorable locations. The author gives comparatively little attention to these small holders whose outlet of forest products may be chiefly through the farm woodlot.

Forecasting demand, prices, costs and returns twenty-five years ahead is a difficult problem and at best must be based on many uncertainties. Low prices for lumber often compel present cutting or liquidation because of heavy fixed charges. Heavy cutting drives lumber prices lower and demoralization results. Nevertheless, the author cites several instances of sustained yield or periodic (25-year) cutting enterprises which have been put in operation on large tracts in favorable locations. He notes greatly increased interest in improved forestry practices by owners who are seeking profits and by forestry experts who are giving attention to forestry accounting.

Government ownership may do much by way of demonstration of profitable practices, by coöperating with adjoining private tracts in setting up sustained yield or periodic cutting programs or by helping to stabilize the market by selling or withholding government-owned forest products.

ALEXANDER E. CANCE

RICHBERG, D. R. *The Mexican oil seizure.* (New York: Standard Oil Co. 1940. Pp. 56.)

SCHUBRING, W. *Hauptergebnisse des 1. landwirtschaftlichen Weltzensus.* (Berlin: Paul Parey. 1939. Pp. 116. RM. 16.)

Ten years ago the International Institute of Agriculture tried for the first time to organize an agricultural census throughout the world. The single censuses in the various countries, carried out individually in the years 1929-1935, were based on schedule forms corresponding to a questionnaire-type suggested by that office in Rome. The results of the census in over 40 states were published by the I.I.A. during the years 1932-1938, separately for each country or group of countries, both in French and English. In Germany's official *Review for Agricultural Policy* (147th special edition), the German representative at the I.I.A., Walther Schubring, considered it useful to write a summary of them also in the German language—it was before the present war. He presents here a recapitulation of those 41 national studies, illustrated by some 75 tabular surveys he compiled concerning the total agrarian surface, the areas classified by size-groups, the number of agricultural units and the categories of production.

Data concerning agriculture in the U.S.S.R. do not figure in this agricultural world census.

PAUL UCKER

SCOTT, E. A. *The Grange movement in Oregon, 1873-1900.* Thesis ser. no. 1. (Eugene: Univ. of Oregon. 1939. Pp. 40, mimeographed. 25c.)

SHOLLENBERGER, J. H. and CASTIGLIONI, J. M. *Comparaciones de calidad en los trigos de entre rios.* Pub. no. 46. (Buenos Aires: Comisión Nacional de Granos y Elevadores. 1939. Pp. 62.)

SMALLEY, H. R., ENGLE, R. H. and WILLETT, H. *American fertilizer practices (second survey): a report relating to the use of commercial plant food presenting information obtained by a survey among 32,000 farmers in 35 states.* (Washington: Nat. Fertilizer Assoc. 1939. Pp. 128. $1.)

TERESHTENKO, V. J. *Coöperative dairying.* Official proj. no. 65-1-97-21. (New York: Coöperative Project and WPA for City of New York. 1940. Pp. 212.)

TIMOSHENKO, V. P. and WORKING, H. *World wheat survey and outlook, January, 1940.* Wheat studies, vol. xiv, no. 5. (Stanford University, Calif.: Food Research Inst. 1940. Pp. 205-242. 75c.)

THOMAS, P. J. and SASTRY, N. S. *Indian agricultural statistics: an introductory study.* Madras Univ. econ. ser. no. 3. (Madras: Univ. of Madras. 1939. Pp. 144.)

Agrarian China: selected source materials from Chinese authors. Compiled and translated by the Research Staff of the Secretariat, Inst. of Pacific Relations. (Chicago: Univ. of Chicago Press. 1939. Pp. xviii, 258. $2.50.)

Comisión Nacional de Granos y Elevadores: memoria correspondiente al año 1938. (Buenos Aires: Comisión Nacional de Granos y Elevadores. 1939. Pp. 431.)

Farmers' retail petroleum associations. Circ. C-113. (Washington: Farm Credit Admin., Coöp. Res. and Service. 1939. Pp. 20. 5c.)

The Jewish Agricultural Society, Inc.: annual report, 1939. (New York: Jewish Agric. Soc. 1939. Pp. 35.)

Present status of the Mexican oil "expropriations," 1940. (New York: Standard Oil Co. 1940. Pp. 79.)

Raw materials. Royal Inst. of Internat. Affairs paper no. 18a. (London: Oxford Univ. Press. 1939. Pp. vii, 83. 2s. 6d.)

Raw materials and foodstuffs: production by countries, 1935 and 1938. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. 75. 60c.)

This is a book of reference. Its purpose is to show the production of the most important raw materials and foodstuffs country by country; the data refer to 128 products and 95 countries, in 1935 and 1938. The year 1935 has been selected mainly because the trade statistics relating to it were more complete than those for either of the two later years.

J. C. Rocca

Statistics relative to the dairy industry in New York State, 1936-1938. Bull. 324. (Albany: New York State Dept. of Agric. and Markets. 1939. Pp. 376.)

United States acreage and production map, together with a summary of wheat crops and exports during the Great War, 1914-1918. (Winnipeg: Sanford Evans Stat. Serv. 1940. $1.50.)

Manufacturing Industries

Price Research in the Steel and Petroleum Industries. Price stud. no. 3. (New York: Nat. Bur. of Econ. Research. 1939. Pp. xiii, 170. $2.00.)

The special committees set up by the Conference on Price Research of the National Bureau of Economic Research have now prepared price research programs for four industries: bituminous coal,[1] textiles, steel and petroleum. The last two reports were prepared under the direction of Samuel S. Stratton and Myron W. Watkins, respectively.

As a background for the suggested programs of price research, the economic and technical characteristics of the steel and petroleum industries are briefly surveyed. One observation concerning crude petroleum seems questionable. It is stated that certain factors "have thus far prevented *any great degree of concentration of control through ownership* and have given to oil production a continuously and highly competitive character" (p. 85, my italics). Then it is pointed out that 20 integrated concerns produce half the output and 15,000 to 18,000 independents produce the remaining half. Certainly when 1/10th of 1 per cent of the companies produce half the output, control is concentrated even though competitive elements may still make themselves felt.

The available price data for steel products appear to be less valuable than those for petroleum products because of the different specifications set up by individual customers. "Relatively little of the steel actually sold may be of the kind described by the base price" (p. 26). This difference in adequacy of price data together with the larger variety of products explains the greater need for the collection of new data for steel products.

The steel report suggests a program of research which will throw the spotlight on a myriad of detail as well as upon certain broad problems. The compilation of information about tonnage and value of individual products

[1] Reviewed in *Am. Econ. Rev.*, March, 1939, p. 142.

shipped from each plant by counties, cities and states, as well as data concerning basing-point price, freight absorption, extras, deductions, variations in engineering standards, etc., illustrate the fine breakdown which is desired. The broader studies are those dealing with the effect of the basing-point price practice upon regional economic development and the elasticity of demand for iron and steel products. Between these two extremes numbers of projects are suggested dealing with such problems as historical price behavior, price control through vertical integration, influence of freight-rate structure on steel pricing, flow of capital, and the influence of the continuous rolling mill and by-product coke oven on certain developments in the industry.

The steel industry should be treated as "a multiple not a single industry. Its products may be grouped according to the economic and technological conditions of production, the economic mobility of the product, the concentration—geographic or corporate—of buying power, the availability of substitutes, and the degree of overlapping, on the part of integrated firms, of stages of manufacture or processing" (p. 32). That such an approach would yield more fruitful results than an undifferentiated analysis of the steel industry is clear. But the cost of obtaining the necessary data and the insuperable difficulties which arise in connection with cost allocation for joint and by-products makes it certain that progress along these lines will be very slow and tortuous at best.

The authors of the petroleum report were much more modest in their suggested program for price research. As contrasted with the wealth of detail to be gathered and studied under the steel program, they are concerned primarily with three broad objectives—namely, the study of price-determining forces, price relationships, and the functions performed by prices in the industry. Study of the proration programs is also suggested.

The student of prices will find here a wide variety of projects to engage his efforts as well as excellent thumbnail sketches of the structure and characteristics of the two industries. The value of these reports would have been increased, however, by the inclusion of comprehensive bibliographies covering the more important studies of prices and price policies made for these industries in the past.

The completion of the programs suggested for these industries as well as those for textiles and bituminous coal will give an excellent cross-section of an important part of the economic system. Such empirical studies (together with those in other fields—aluminum, leather, milk, automobile, non-ferrous metals, etc.), when related to theoretical musings concerning imperfect competition, should serve as the foundation for a comprehensive synthesis and reformulation of price theory in a dynamic state.

JULES BACKMAN

New York University

NEW BOOKS

BRITTON, B. S. *The history of paper merchandising in New York City.* (Chicago: Howard Pub. Co. 1939. Pp. 80. $1.)

LEMERT, B. F. *The tobacco manufacturing industry in North Carolina.* (Raleigh: Nat. Youth Admin. of North Carolina. 1939. Pp. 107, mimeographed.)

MITCHELL, W. E., MCDONALD, F. H., MCINTOSH, H. T. and JOB, R. C. *Industrialization as a means to southern progress.* Circ. no. 3. (Atlanta: Georgia School of Technology. 1940. 10c.)

PERAZICH, G. and FIELD, P. M. *Industrial research and changing technology.* Rep. no. M-4. (Philadelphia: WPA, Nat. Research Project. 1940. Pp. xii, 81.)

PERAZICH, G., WOAL, S. T. and SCHIMMEL, H. *Mechanization in the cement industry.* Rep. no. M-3. (Philadelphia: WPA, Nat. Research Project. 1939. Pp. xv, 113.)

STEVENSON, L. T. *The background and economics of American papermaking.* (New York: Harper. 1940. Pp. xii, 249. $3.)

VITO, F. *I sindacati industriali: consorzi e gruppi.* 3rd ed. (Milan: Giuffrè. 1939. Pp. vii, 195. L. 25.)

This book is the third completely revised edition of Professor Vito's well known monograph on industrial combination. While in the more voluminous first and second editions (1930 and 1932) considerable space was devoted to description and to a discussion of questions of policy, in the present edition the author is almost exclusively concerned with the theory of industrial combination and with its application within the framework of the Italian corporate state. The monograph includes an able description of the economic and technical factors leading toward combination, a comprehensive theoretical analysis of the functions of combinations in the modern economy and a discussion of the control of combinations of industrial enterprises in the Italian corporate system.

Professor Vito believes that in the modern economy industrial combinations have definitely come to stay, for they perform functions which are both necessary and useful. In types of enterprises in which the proportion of fixed costs is large, cyclical contraction in demand and falling prices are likely to induce entrepreneurs to engage in ruinous, cut-throat competition which is ultimately bound to result in an intensification of the general distress and in heavy losses of invested capital. The way out, Professor Vito thinks, is combination, a compromise between the rigidities of modern large-scale production and the risks of sharp price fluctuation. The danger of higher prices for the consumer is to be prevented through supervision insuring the maintenance of prices equal to the costs of the marginal firm in the combination. The activities of this firm, moreover, must be carefully controlled by appropriate public or semi-public organs (in Italy by the fascist "corporations") with a view to increasing its efficiency and reducing its costs and thus the price of the product to the consuming public. Even though Professor Vito himself is aware of the difficulties inherent in such a program of control—the discovery of the marginal firm and of its costs, the necessity of constant vigilance over the price policies of the cartellized enterprises, the danger of continued operation of inefficient firms—he remains convinced of its essential soundness and practicability, a conviction which, however, not all readers of his scholarly and suggestive monograph may find it possible to share.

WILLIAM G. WELK

Changes in retail prices of electricity, 1923-38. U. S. Bur. of Labor Stat. bull. no. 664. (Washington: Supt. Docs. 1939. Pp. viii, 79. 15c.)

The dynamics of automobile demand. (New York: General Motors Corp. 1939. Pp. 139. Gratis.)

Survey of American listed corporations: reported information on selected manufacturing groups. Vol. I. (New York: Securities and Exchange Commission. 1940. Pp. 291.)

Transportation and Communication

NEW BOOKS

COLVIN, E. M., compiler. *Transportation of agricultural products in the United States, 1920–June, 1939: a selected list of references relating to the various phases of railway, motor, and water carrier transportation.* Part 1. *General transportation and transportation of agricultural products.* Agric. econ. bibliog. no. 81. (Washington: U. S. Dept. of Agric. 1939. Pp. x, 250.)

HAWLEY, L. T. *Alabama's balance of rail and water traffic, 1932-1937.* Multilithed ser. no. 2. (University: Univ. of Alabama Bur. of Bus. Res. 1939. Pp. 130.)

KISTLER, T. M. *The rise of railroads in the Connecticut River Valley.* Smith College stud. in hist., vol. xxiii, nos. 1-4. (Northampton: Smith College, Dept. of History. 1938. Pp. 289.)

MENEFEE, F. N. *The St. Lawrence seaway.* (Ann Arbor, Mich.: Edwards Bros. 1940. Pp. 325. $2.50.)

PARMELEE, J. H. *A review of railway operations in 1939.* Reprinted from *Railway Age* for Jan. 6, 1940; figures revised to March 25, 1940. (Washington: Bur. of Railway Econ. 1940. Pp. 38.)

SPERO, H. *Reconstruction Finance Corporation loans to the railroads, 1932-1937.* (Cambridge: Bankers Pub. Co. 1939. Pp. 185. $3.50.)

SUMMERS, H. B. and SUMMERS, R. E., compilers. *The railroads: government ownership in practice.* (New York: Wilson. 1940. Pp. 144. 75c.)

American shipping needs: committee report. (Washington: Chamber of Commerce of U. S. 1940. Pp. 16.)

Fifty-second annual report on statistics of railways in United States, for year ended December 31, 1938, including also selected data relating to other common carriers (except motor carriers) subject to the Interstate Commerce act for the year 1938. (Washington: Interstate Commerce Comm. 1939. Pp. viii, S-225, 279. $1.50.)

Interstate Commerce Commission: 53rd annual report. (Washington: Supt. Docs. 1939. Pp. iii, 200. 75c.)

Investigation of railroads, holding companies, and affiliated companies. Hearings, part 22. *The Wabash Railway Company, finances, 1930-31, interline account audits, receivership and reorganizations. Missouri Pacific R. R. Co. reorganization.* (Washington: Supt. Docs. 1939. Pp. xvi, 9553-9964.)

Investigation of railroads, holding companies, and affiliated companies. Report, parts 1 (before 1920) and 2 (1920-24). (Washington: Supt. Docs. 1940. Pp. xxxviii, 514; xlviii, 515-1178.)

An outline of activities of the Association of American Railroads for the year 1939. (Washington: Assoc. of Am. Railroads. Pp. 72.)

Railroads of today. Smithsonian Inst. radio program, vol. i, no. 16. (New York: Columbia Univ. Press. 1940. Pp. 22. 10c.)

Trends in highway finance. Michigan pamph. no. 5. (Ann Arbor: Univ. of Michigan Bur. of Govt. 1940. Pp. 20.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

ELLIS, L. E. *Reciprocity, 1911: a study in Canadian-American relations.* Prepared under the direction of the Carnegie Endowment for Internat. Peace. (New Haven: Yale Univ. Press. 1939. Pp. x, 207. $2.50.)

This is the thirteenth volume in the Canadian-American Relations series. In the foreword, Professor Shotwell aptly characterizes this history of the episode of 1911 as a story of dramatic interest in itself presented, not in the abstract terms of political argument, but as a vital human document.

It is not so much a study of the reciprocity proposal itself and its economic significance as of the forces and conditions on both sides of the border accounting for its initiation, attending its progress through Congress, and compassing its defeat in Canada. The discontent of the western states and provinces, the precarious positions of President Taft and Premier Laurier and their parties, the protected interests fearful of any breach in the tariff walls, the American newspapers bent upon duty-free paper, the skillful manipulation of public sentiment by propaganda and political pressures—all these and other influences are seen in their respective rôles.

The book is at once a significant addition to the literature of propaganda methods and a scholarly reëxamination of a crucial period in the tariff relations between Canada and the United States, based upon the exploration of a wealth of source material, some of which has only recently become available.

The most obvious beneficiaries of the controversy were the American newspapers who got free newsprint. The larger meaning of the episode may be found in its accentuation of political and tariff trends in the two countries. It also marked an intermediate stage in reciprocity procedure between the treaty of 1854 and the trade agreements of 1936 and 1938.

PAUL S. PEIRCE

GEISER, A. *Die Kompensation als Mittel der Aussenhandelspolitik unter besonderer Berücksichtigung der Schweiz.* (Zürich: Schulthess. 1939. Pp. 109.)

The author gives us a thorough picture of the many obstacles which since 1931 have handicapped free imports and exports, especially in European countries. Besides the defensive system of quantitative contingents and the aggressive system of monetary clearing, Geiser devotes two-thirds of his thesis to a discussion of the question of *compensatory exchange of goods* or what he calls the very basis of every commercial policy, *i.e.,* a system of public regulation of international trade making use of a country's exports for its imports and vice versa.

As for Switzerland in particular, her specially created compensation offices for coal and combustibles, for cereals, fodder and malt, for sugar and industrial oils seem to have worked well during the depression. However, since the federal government was compelled to resort to expensive means because of exchange control abroad, this intervention should be moderated as soon as general commercial relations become freer.

PAUL UCKER

JACQUELIN, D. G. *Swiss-American economic relations.* Geneva stud., vol. x, nos. 4-5. (Geneva: Geneva Research Centre. 1939. Pp. xx, 295. 80c.)

The plan and purpose of this book are well set forth in the author's preface. She aims to examine in detail the economic relations between the United States and Switzerland, stressing the Swiss rather than the American side of the picture, and, second, to use the Swiss-American Trade Agreement as a case study of the possibilities of lowering existing barriers to international trade at a period when the general tendency is in the opposite direction.

The principal physical and social aspects of the Swiss economy are first discussed to give the reader a background. Part 1 presents a historical survey of Swiss-American economic relations since 1848. Part 2 consists of an analysis of the economic structure of Switzerland and an evaluation of the importance of the United States as a market for Swiss products. Part 3 deals with recent commercial relationships and in particular with the Trade Agreement of 1936 and its influence on reciprocal trade. Part 4 is a study of other items in the balance of payments, especially the movement of capital and the tourist trade. Then follow a brief summary; an appendix consisting of the texts of the conventions of 1847 and 1850 and of the Trade Agreement of 1936; and 20 pages of classified bibliography.

Mrs. Jacquelin, an American, originally prepared this work as a doctor's dissertation for the Graduate Institute of International Studies. Her first thought was merely to make a case study of the Hull reciprocal trade program. But the scope of her investigations was so broadened as to produce, in the words of Dr. W. E. Rappard, "the best analysis, based on original sources, of Switzerland's economic evolution during the last century that, to my knowledge, exists in English." Its thorough documentation shows extensive research. The materials drawn from a wide range of sources and touching all phases of agricultural, industrial, financial, and trade life and politics are effectively organized. The style is clear and interesting, and the tone judicial. The treatment of the trade agreement, while sympathetic, is realistic and well-balanced.

PAUL S. PEIRCE

LIN L. *American imports from China prior to and immediately following the Sino-Japanese War, 1932-38.* China econ. information bull. no. 1. (New York: Trans-Pacific News Serv. 1940. Pp. 9.)

LONG, O. *Le contingentement en France: ses incidences économiques.* (Paris: Lib. Technique et Econ. 1938. Pp. 182.)

The author begins with a brief description of the quota technique as employed in international commercial transactions and then enters into an extensive historical treatment of the subject. The title would indicate that the document deals only with French quotas; however, the development of his thesis leads as well into a consideration of the quotas imposed by foreign countries.

The introductory sections are utilized as a background for the two main analytical portions of the book, the first of which treats of the position of export and import quotas in the national market. Attention is called to the difficulties attendant upon administration, particularly in the apportionment of the available market. Then the economic consequences are treated in an analysis of the effect of quotas upon the entire price structure, and the assumed advantages of controlled operation are weighed against the costs which must be met. It is pointed out that the removal of certain rigidities, while now appearing desirable, may involve only temporary advantages which will be followed

by greater restrictions than those which the original action sought to overcome.

The second main portion of the work turns to a descriptive study of the present international commercial relationships involving the use of quotas. Some space is devoted to the direction that the movement seems to be taking.

In his conclusions M. Long states that the quota system is not so bad as sometimes represented but paradoxically admits that it offers no permanent solution. He agrees with many other writers in the field that international trade restrictions lead eventually to autarchy. In going a step further he thinks that an extension of the quota system will be an important force in the breakdown of our contemporary economic structure and that international trade barriers must be followed by domestic barriers that will eventually result in a complete disappearance of freedom in individual economic action with the substitution of state control. No course of action is recommended and the concluding sentence, "A chacun maintenant de choisir sa solution," furnishes an indefinite close to a document that is little more than a pessimistic warning.

ARTHUR ROWLAND BURNSTAN

LÖSCH, A. *Die räumliche Ordnung der Wirtschaft: eine Untersuchung über Standort, Wirtschaftsgebiete und internationalen Handel.* (Jena: Fischer. 1940. Pp. viii, 348. RM. 12.)

MANOÏLESCO, M. *Die theoretische Problematik des Aussenhandels: Synthese; Beweisführung; Polemik.* (Kiel: Inst. für Weltwirtschaft an der Universität Kiel. 1940. Pp. 82.)

SAYRE, F. B. *The protection of American export trade: being the course of lectures delivered at Westminster College, Fulton, Missouri, 1939.* (Chicago: Univ. of Chicago Press. 1940. Pp. xi, 93. $1.50.)
Trade Agreement acts.

WITHEROW, G. A. *Foreign trade of the United States, calendar year 1938.* Part II. *Trade by regions and countries.* Trade promotion ser. no. 198. (Washington: Supt. Docs. 1940. Pp. xiv, 155.)

American-Japanese trade and treaty abrogation: an economic analysis of the possible effects of the abrogation of the American-Japanese Treaty of 1911 upon American-Japanese trade. (San Francisco: Japanese Chamber of Commerce. 1939. Pp. 33.)

Balances of payments, 1938. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. 148. $1.25.)

Foreign trade trends in items affected by trade agreements. (Washington: Chamber of Commerce of U. S. 1940. Pp. 30.)

International trade statistics, 1938. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. 345. $3.)

Trade barriers among the states. Proc. of National Conference on Interstate Trade Barriers, April 5-7, 1939, Chicago, Ill. (Chicago: Council of State Govts. 1939. Pp. 127.)

Accounting, Business Methods, Investments and the Exchanges

The History of an Advertising Agency: N. W. Ayer & Son at Work, 1869-1939. By RALPH M. HOWER. Harvard stud. in bus. hist., no. 5. (Cambridge: Harvard Univ. Press. 1939. Pp. xxxv, 652. $4.00.)

This history has much wider scope and greater significance than is indicated by its title. In essence it is almost a complete survey of the evolution of national advertising in the United States. As such, it is an almost indispensable background for a just appraisal of the economic and social effects of advertising; probably it is more valuable for this purpose than any cross-section analysis could be.

Today the advertising agency is the focal point of advertising activities. It has reached this position, however, only after many transitional stages, practically all of which have been experienced in the life of the agency of N. W. Ayer & Son, founded in 1869 by Francis Wayland Ayer and directed by him until his death in 1923. The Ayer agency may even claim to be the oldest in the country, for in 1877 it took over the business founded by the pioneer agent, Volney B. Palmer, in 1841. The agency has consistently been ranked among the three or four leaders both in quantity and in quality of advertising, and still is.

The record of the company represents a superb individual achievement, one that amply warranted the writing of the story as a biography; and this seems to have been the original plan. But although the character and work of F. Wayland Ayer still loom large in the book, it has been written primarily as the history of his institution.

Naturally the progress of this company, as of most other companies and individuals, has not been without its hard struggles and its regrettable episodes. "Official" biographers and historians are prone to exaggerate the dramatic victories and to suppress the less creditable incidents; whereas the opposite policy is usually followed by muck-rakers and sensation-mongers. The Ayer agency deserves credit for its courage in turning over its records and other material to an outsider who had little previous knowledge of advertising or predisposition to favor it, and in giving him so free a hand in his presentation.

Fortunately the author proved himself a scholar and a scientist. He seems to have resisted the temptation to over-dramatize his story or to indulge in championing or crusading. Undeniably he could have produced a more colorful narrative by either of these policies. As he says in his admirable preface:

> It was not the purpose of this book either to attack or to defend the advertising agency as an institution. If it had been, my task would have been simpler; for most of us write more easily and effectively when we are hot in praise or blame.

This effort to observe strict neutrality undoubtedly had the strong support of the editor, whose preface may be taken as an ideal summary of the business historian's creed.

The book is divided into two parts. Part 1 contains a chronological narrative of the agency's history. It corrects some common misconceptions re-

garding the original status of the advertising agent. Ayer, like Palmer and other predecessors, appears to have begun as an agent in the legal sense, taking orders for space in periodicals and receiving commissions. But soon his business became more complex. Part of his income came from buying space at wholesale and selling at retail, part from selling type and ink to publishers in exchange for space, part from publications he owned or controlled. In 1875, Ayer followed the lead of George P. Rowell in announcing himself as the agent of the advertiser, not the publisher. Unlike Rowell, Ayer adopted the method of remuneration that this relationship logically implied—namely, that of charging the client the net cost of space plus a commission for his services.

Subsequent history shows the gradual widening of agency services to include marketing research, preparation of copy, planning and merchandising campaigns and various other activities. Part 2, which constitutes about two-thirds of the entire book, gives a detailed analysis of the operations of the Ayer agency. While its chief value is to the student of advertising, it should be useful to any business-man or social scientist. The carefully compiled tables of costs, salaries, profits, kinds of advertising, etc., at various periods, are especially illuminating. They would have been even more valuable if brought down to 1939; but one could scarcely expect the agency to reveal current figures.

The author's interpretations and conclusions, of course, will not be accepted by all readers. Few will deny the value of his facts or his skill in presenting them.

G. B. HOTCHKISS

New York University

NEW BOOKS

ALFORD, L. P. *Principles of industrial management for engineers.* (New York: Ronald. 1940. Pp. xxii, 531. $4.50.)

Chapters on mechanization, ownership of industry, organization and control of industry, purchasing control, storeskeeping, production control, job standards, cost accounting, wage payment plans, employee relations, and industrial safety.

BARTIZAL, J. R. *Budget principles and procedure.* (New York: Prentice-Hall. Pp. 237. Trade, $3.65; school, $2.75.)

BATCHELOR, B., editor. *The new outlook in business.* (New York: Harper. 1940. Pp. xiii, 323. $3.)

A collection of 21 papers by industrialists and experts in various fields of industry.

BECKMAN, R. O. *How to train supervisors: manual and outlines for determinate discussion.* (New York: Harper. 1940. Pp. xii, 305. $3.)

BLACHLY, F. F. and OATMAN, M. E. *Federal regulatory action and control.* (Washington: Brookings. 1940. Pp. xviii, 356. $3.)

BOGEN, J. I., and others. *Problems and responsibilities of the finance officer.*

Finan. manag. ser. no. 56. (New York: Am. Management Assoc. 1939. Pp. 32. 50c.)

BREWER, J. M., and others. *Introductory business training.* New ed. (Boston: Ginn. 1940. Pp. 531. $1.60.)

BRIGGS, R. P., editor. *Proceedings of the fifteenth annual Michigan accounting conference, Ann Arbor, November 10, 1939.* Michigan bus. papers no. 7. (Ann Arbor: Univ. of Michigan. 1940. Pp. 56.)

BYRNES, T. W. and BAKER, K. L. *Do you want to become an accountant?* (New York: Stokes. Pp. 205. $1.50.)

CHATTERS, C. H. and TENNER, I. *Municipal and governmental accounting.* (New York: Prentice-Hall. 1940. Pp. xviii, 794. Trade, $6; school, $4.50.)

DONALD, W. J., and others. *Industrial marketing: cost control—product promotion—application engineering.* Marketing ser. no. 36. (New York: Am. Management Assoc. 1939. Pp. 40.)

EDWARDS, A. L. *Product standards and labeling for consumers.* (New York: Ronald. 1940. Pp. viii, 134. $2.50.)

EISNER, M., and others. *How government regulates business: an explanation of the principal federal and state laws which regulate business.* (New York: Dynamic America Press. 1939. Pp. xiv, 120.)

Series of radio addresses on the Federal Trade Commission act, Food, Drug and Cosmetic act, price-fixing laws, Federal Wage and Hour law, anti-trust law, taxation of business.

FIELD, K. *Introduction to investment analysis.* (New York: Ronald. 1940. Pp. xii. 340. $3.50.)

FREY, A. W. *Manufacturers' product, package and price policies: modern merchandise management.* (New York: Ronald. 1940. Pp. xii, 429. $4.50.)

The title of this book is accurately descriptive of its content. Volumes have been written on salesmanship, sales management, advertising and other aspects of manufacturers' marketing policies, and the merchandising aspects of business have been frequently treated from the retailer's point of view; but the very important merchandising problems of manufacturers have received inadequate attention in marketing literature. Many individual businesses, however, have done excellent jobs of product planning as is reflected in the many examples which Professor Frey has drawn from actual business practices.

Professor Frey's timely book, therefore, is a welcome addition to the literature on manufacturers' marketing policies. Preface remarks indicate that the book is directed toward business executives, but it is written in such a careful well-organized style as to make it suitable for classroom use.

GERALD B. TALLMAN

GILMAN, S. *Accounting concepts of profit.* (New York: Ronald. 1939. Pp. xv, 635. $5.)

The increasing recognition given to profit accounting is overdue. Hence a reëxamination of accounting concepts from the profit viewpoint is to be welcomed. That Mr. Gilman in pioneering a new area still leaves work for others is no criticism when a start is sorely needed. The first third of the book, in particular, is a serious study of the concepts and conventions behind our accounting sales. Although there will be those who will make the charge of "theoretical," it must be recognized that an examination to find the thread of logic and consistency in apparently inconsistent rules is essential to sound future development.

It is to be regretted that the type of analysis with which the treatise starts is not continued in the discussion of specific problems. The chapters dealing with these provide summaries of divergent opinions and some historical background but are not analyzed in terms of fundamental concepts. Nor is the possibility of differing approaches to meet the differing needs of the various equities adequately discussed.

The author by his treatment recognizes the importance of underlying concepts and conventions in accounting. "The methods of estimating periodic accounting profit have been formalized by a variety of conventions, doctrines, rules and practices based in part upon logic and in part upon expediency." The profit figure which is developed in any set of accounts is the child of the concepts and conventions followed. What are the financial, business, investment and social implications to be drawn from business net income (accounting profit) ? This is the important question still unanswered by this book.

W. P. FISKE

HALL, F. P. *Government and business.* 2nd ed. (New York: McGraw-Hill. 1939. Pp. xii, 455. $4.)

This revision of an earlier work with the same title constitutes an improvement in several respects. It is more readable, due to the abandonment of the outline form which characterized the first edition; it is longer (455 pages as compared with 275) ; and the documentation is much improved.

In the first part of the book the author discusses the various theories with regard to the functions of the state; the constitutional limitations upon the control of business; the commerce clause of the Constitution; methods of control; and types of regulation. In the second part, comprising four-fifths of the book, he deals with the regulation of railroads, buses and trucks, aviation, public utilities, banks, insurance companies, coal companies, ordinary business enterprises, packers, securities, foods and drugs; with public ownership and operation, federal, state, and municipal; and with certain miscellaneous topics, such as administration of bankruptcy and government aid to business.

The book will prove helpful to those who are giving general courses on the relation of government to business. The treatment is sane, and usually accurate.

A defect of the work is the extremely haphazard manner in which the chapter references are presented. In arranging these references there is not the slightest evidence of order or system. The books are not arranged in alphabetical order nor in chronological order; the date of publication is not given; and books by the same author are not even grouped together. On page 255 in the chapter references (as distinct from the footnote references) the *Annual Report of the Federal Trade Commission* appears 9 times. Why cannot these nine references be brought together as one? And why on pages 398-399 is it thought desirable to list the United States Code as 11 separate references and Postal Laws and Regulations as 6, making an apparent total of 29 references for this chapter when in fact there are only 14?

ELIOT JONES

HARWOOD, E. C. and FOWLE, H. *How to make your budget balance.* (Cambridge: Am. Inst. for Econ. Research. 1940. Pp. 143. $1.)

Relates to personal budgets.

HECKERT, J. B. *The analysis and control of distribution costs for sales executives and accountants.* (New York: Ronald. 1940. Pp. xvii, 420. $5.)

HERRICK, A. *You don't have to be rich.* (New York: Appleton-Century. 1940. Pp. 224. $1.75.)

HOTCHKISS, G. B. *An outline of advertising: its philosophy, science, art, and strategy.* Rev. ed. (New York: Macmillan. 1940. Pp. xxvii, 631. $4.)

KESTER, R. B. *Principles of accounting.* 4th ed. (New York: Ronald. 1939. Pp. xx, 703. $4.)

Through three earlier editions Kester's *Accounting* has been a standard text with fully-earned wide acceptance. It now appears under a new title and in a new format with a larger page. Though the same approach has been continued, chapters have been combined and new material has been added to give a quite new appearance. In particular, a long illustrative bookkeeping example, increased attention to the corporation and a new discussion of simple consolidation have been included. The book is in every sense a thorough revision by a teacher of long experience who shows an ability to meet new conditions.

W. P. FISKE

KIMBALL, D. S. and KIMBALL, D. S., JR. *Principles of industrial organization.* 5th ed. (New York: McGraw-Hill. 1939. Pp. xix, 478. $4.)

The modest revision of this well known text is intended to incorporate brief discussions of recent legislation and managerial developments and to revise its statistical data. The new material is typically added as topical insertions so as to preserve the earlier pattern of the book. For the reason that it is more up to date, the revision will be regarded generally as an improvement, though the authors mar their work with cavalier and debatable generalizations regarding the effects of recent legislation.

R. D. C.

KRANE, A. *Financing your business, or, How to raise capital.* (Jacksonville, Fla.: Seminole Pub. Co. 1939. Pp. 223. $15.)

LASSER, J. K., and others. *New problems of sales management.* Marketing ser. no. 35. (New York: Am. Management Assoc. 1939. Pp. 32. 50c.)

LESTER, H. M. *Retail training in principle and practice.* (New York: Harper. 1940. Pp. 188. $2.50.)

MCGRAW, J. H., JR., and others. *Public and industrial relations in production.* Production ser. no. 113. (New York: Am. Management Assoc. 1939. Pp. 40. 75c.)

MEAD, E. S. and GRODINSKY, J. *The ebb and flow of investment values.* (New York: Appleton-Century. 1939. Pp. x, 513. $5.)

MONCHOW, H. C. *Seventy years of real estate subdividing in the region of Chicago.* Stud. in the soc. sci. no. 3. (Evanston: Northwestern Univ. Grad. School. 1939. Pp. viii, 200. $2.25.)

A study of the extent of land subdividing in the Chicago metropolitan area, this represents an attempt to discover the relationships existing since 1871 between the rate of subdividing as measured by the number of lots in recorded plats and other economic phenomena of the region and of the United States.

After a presentation of the basic subdivision data, an examination is made of their behavior as compared with population growth, with various measures

of general business conditions, and with specific measures of the real estate market such as movements of land values, the rate of building construction, and rent levels. Attention is given to the relationship between the location of manufacturing establishments and the extension of public transportation facilities in and to the different localities comprising the metropolitan area and their effect on subdividing activity, and to "institutions affecting the sale and purchase of subdivision lots." The final chapter explores some of the means advocated or used by public authority in influencing or controlling subdivision activity.

The study represents another contribution to a line of studies the effect of which is to illuminate and in some degree to measure the effects of subdivision practices on community development, the extent to which speculation as the principal incentive to subdivision has resulted in excess of land subdivided for urban use, and the costs, both private and public, which have been involved in this activity.

One of the major contributions of this study is presented as "a by-product." This by-product is summarized in the statement (p. 39), "The results show a considerable degree of uniformity, sufficient at least to warrant the positing of a ratio of twenty-two residential lots on the average per one hundred of the population."

The discussion of the control of subdividing closes with the rather unsatisfying recommendation of centralization of control in a single agency. The character of this agency is not specified. The author discusses public ownership of land in urban areas, but appears not to approve this device on account of practical difficulties rather than theoretical ones. The recommendation is also made that land should be placed in the category and under many of the controls commonly exercised for public utilities. The method of attaining this end is not discussed.

ERNEST M. FISHER

NIXON, H. K., and others. *Sales costs and price policy.* Marketing ser. no. 37. (New York: Am. Management Assoc. 1939. Pp. 32. 75c.)

RAUTENSTRAUCH, W. *Industrial surveys and reports.* (New York: Wiley. 1940. Pp. x, 189. $2.50.)

RIEGEL, J. W. *Salary determination: common policies and selected practices in forty American corporations.* Rep. no. 2. (Ann Arbor: Univ. of Michigan Bur. of Industrial Rel. 1940. Pp. 278. $3.50.)

A valuable pioneer study of the way business concerns determine salary levels, this covers "routine workers on salary" and "managers and technicians paid less than $10,000 per year." The volume is primarily a report of the way the forty companies studied determine salaries.

Some of the early chapters of the book deal with such topics as salary policy, salary survey, salary for key and uncommon positions. Much attention is given to the methods by which the companies carry on salary surveys and determine the standard salaries for the key positions. After key positions have been graded and a salary schedule framed for them, determination for salaries of uncommon positions can go forward on the basis of comparison with the key positions. The later chapters of the book deal with such items as compensating the individual employee, incentive plans for salaried workers, valuation of managerial and technical services. The last chapter contains many helpful suggestions on the actual administration of a salary plan.

It is advised that a regular procedure be set up to review the salary schedule at frequent intervals. It is suggested that the cost of continuing control of salary schedules might run from $3 to $5 per employee per year. "Judicious salary administration can promote the proficiency, coöperation, ambition, and satisfaction of these millions of employees, technicians and managers. It therefore is advantageous not only to them, but to employers and the community as well."

In general, the discussion is confined to the factual presentation of what was discovered. Occasionally comments are made that go beyond the evidence presented. On page 32, we are told that "the increase in salary necessary (to move a salaried worker) may be 20 per cent or even more." The next paragraph implies that a one per cent difference may be sufficient to bring adjustment in the commodity or securities market.

One wonders, however, whether the cases are strictly parallel. Is it a particular worker who is wanted or just any worker? A discussion in the first part of the book implied that wages should be held very close to the prevailing rate. If one wants a particular worker he might have to pay a substantial increase above the customary rate. But might not that also be true if one wanted a particular bushel of wheat, especially if it happened to be located in central Kansas or Australia?

In general the book is strongest in the parts that give the facts resulting from the survey and in making practical suggestions based upon the facts. Many tantalizing suggestions of a theoretical nature are dropped, which should be explored. Some of these theoretical issues, if explained, would doubtless throw much light on the fundamental causes of salary differences.

HAROLD F. CLARK

SAXE, E. *Estate accounting.* (New York: Author. 1939. Pp. 256. $3.50.)

SELBY, P. O. *Index to the teaching of general business, 1929-1938.* (Kirksville, Mo.: Research Press. 1939. Pp. 48. 53c.)

WATKINS, M. W., and others. *Public regulation of competitive practices in business enterprise.* 3rd ed. (New York: Nat. Industrial Conference Board. 1940. Pp. xxi, 355.)

WHEELER, B. L., and others. *Determination of depreciation and obsolescence policy.* Finan. manag. ser. no. 57. (New York: Am. Management Assoc. 1939. Pp. 28. 75c.)

American Association of Collegiate Schools of Business: proceedings of the 21st annual meeting, College of Commerce, University of California, and the Graduate School of Business, Stanford University, April 20, 21 and 22, 1939. (Fayetteville, Ark.: Am. Assoc. of Collegiate Schools of Bus. 1939. Pp. 215. $1.25.)

American Institute of Accountants: 1939 yearbook. (New York: Am. Inst. of Accountants. 1940. Pp. vi, 471.)

The investment of the funds of social insurance institutions. Stud. and rep., ser. M, no. 16. (Geneva and Washington: Internat. Labour Office. 1939. Pp. viii, 196. $1.25.)

Investments and trade. (New York: Standard Oil Co. 1940. Pp. 19.)

Investment trusts and investment companies, report of the Securities and Exchange Commission, pursuant to section 30 of the Public Utility Holding Company act of 1935. Part 2. *Statistical survey of investment trusts and investment companies.* Part 3. *Abuses and deficiencies in the organization and operation*

of investment trusts and investment companies. Chap. 5. *Problems in connection with capital structure.* Chap. 6. *Accounting practices and reports to stockholders generally—accounting practices of the United Founders Corporation group of companies with a description of their activities.* (Washington: Securities and Exchange Commission. 1939. Pp. 937; 440; 414.)

Selected books on business. Nebraska stud. in business no. 43. (Lincoln: Univ. of Nebraska. 1939. Pp. iv, 50. 50c.)

Capital and Capitalistic Organization

A. T. & T. The Story of Industrial Conquest. By N. R. DANIELIAN. (New York: Vanguard. 1939. Pp. 460. $3.75.)

The recent investigation of the telephone industry made under the direction of the Federal Communications Commission was unique in its thoroughness. When the investigation was closed, there were over 60 volumes of transcript, over 2,000 exhibits, and more than 70 volumes of staff reports. In this record of telephone company history, accumulated at a cost of $1,500,000 to the government, there is probably the most complete factual information in existence on the operations of an important American business enterprise. It is complete not only because of its historical continuity from the beginnings of the telephone industry to the present, but also because all phases of the Bell System operations are covered. From a study of this material, Mr. Danielian has prepared a story of industrial conquest.

The work of Danielian is not a restatement of the Commission's report on the investigation. Rate regulation is only one of the different aspects of Bell System operations which are considered by the author. In fact, it is the influence exercised by the A. T. & T. management on owners, employees, competitors, and the public that receives most attention in this volume. Actually a social evaluation of the telephone company's activities is attempted.

The Bell System is presented as an industrial empire and the similarities existing between the policies and activities of this organization and those of a political state are stressed at every point. It is the contention of the author that its methods of control, its means of expansion, and its relations with the government and the public are all fundamentally political in nature. He would have the reader see the Bell System as a state within a state, and an imperialistic one, at that.

The workmanship of the book is of high quality. Mr. Danielian's style is interesting and his arguments well supported. The facts are said to be a matter of public record and beyond dispute. Indeed, much of the material is in the form of quotations from memoranda and letters written or received by major executives and from minutes of important conferences in which Bell System executives participated. As financial and utility expert for the Federal Communications Commission, the author was in an

excellent position to become familiar with the information made available by the investigation. That familiarity is reflected in the finished work.

The book might be considered an indictment of policies and practices of the giant corporations. After pointing out the many conflicts between the activities of the Bell System management and the interests of the general public, the author calls attention to the fact that much the same thing is true of the other large corporations of the country. Given a wide distribution of stock and no one stockholder having a dominant position, a self-perpetuating business bureaucracy usually develops. Once established, such a bureaucratic organization tends to follow a pattern of political behavior. The A. T. & T. is presented as one of the more important and better behaved of these corporations.

It is unfortunate that the material chosen or the interpretation thereof is so consistently unfavorable to the corporation. Not only are the policies and activities of the A. T. & T. management criticized but the assumptions of the author with respect to the underlying motives place the management in a bad light. The reader is very likely to conclude that the author's viewpoint is biased. In case the reader is of the opinion that the decisions of a management dominated by operating executives might be in accord with the general social welfare more often than the decisions of a management composed of capitalists or financiers, he will find it difficult to avoid the impression that the version is one-sided. Since the volume is presented as an attempted "social evaluation of the telephone company's activities," such an impression detracts considerably.

W. E. DICKERSON

Ohio State University

NEW BOOKS

BUCHANAN, N. S. *The economics of corporate enterprise.* (New York: Holt. 1940. Pp. xvii, 483. $3.25.)

CAHAN, S. *Cost of utility regulation, State of New York, 1921-1939.* (New York: Public Service Comm. 1940. Pp. 15. 15c.)

CAREY, H. F. *Cases on the law of trusts.* 2nd ed. (Rochester: Lawyers Co-op. Pub. Co. 1939. Pp. 816. $6.50.)

FEROLDI, F. *I presupposti economici della discipline giuridica dei gruppi d'imprese.* (Milan: Soc. Edit. "Vita e Pensiero." 1939. Pp. ix, 121. 8 lire.)

While cartels have been regulated and fitted into the Italian corporative system, sundry other forms of entrepreneur association, which some students consider the true unit of the modern productive process, remain outside. Here are gentlemen's agreements, the personal union, stock sharing, the holding company—all devices to reduce overhead costs. This thoughtful study examines their economic function, together with proposals for their reform, and suggests a basis for inclusion within the corporative system.

R. F. FOERSTER

MONTGOMERY, R. H. *The brimstone game: monopoly in action.* (New York: Vanguard. 1940. Pp. 94. $1.25.)

RESTA, M. *Il capitale fisso e le trasformazioni industriali.* (Padua: Cedam. 1938. Pp. 176. 16 lire.)

This study is a kind of synthesis of the principal writings in the field of economic dynamics, with special reference to the investments of fixed capital and to their influence on the transformations of the size and structure of industry. Chapters I, II, III establish the basic elements of the problem of transformations of fixed capital; and chapters IV, V, VI review the most significant qualifications for its mobility and the possibilities of adaptation of existing plants to the new requirements of production. The purpose of this synthesis is to clarify the economic consequences resulting from the process of expansion of fixed capital and the social implications of this phenomenon.

The author covers the long journey from Ferrara's first approaches on economic significance of fixed capital to its economic and social implications in the still rather undetermined sphere of regulated and planned economy. The stages in this rapid and difficult route are marked, on one hand, by the various aspects of the industrial organization in the continuous process of technical evolution, and, on the other, by the evolution of the concept of fixed capital, as defined in the theoretical analysis of Macleod, Leroy-Beaulieu, Pantaleoni and Machlup. Chapter VI, especially concerned with the rapid amortization of fixed capital, is one of the most interesting and full of keen, though rather controversial, remarks. Mr. Breglia observes that, while the manufacturer wants a continuous change in circulating capital, at the same time he stands for the maximum of stability of fixed capital. The author points out that industrial plants, especially on the Continent, are built to last for too many years, with the consequence that they become obsolete and, strange enough, constitute a less safe investment than the circulating capital invested in the enterprise. This statement frequently made by European economists and business-men suggests as a solution the building of industrial plants to last for a shorter period of time. But the experience in the United States shows that this device does not protect the investor against the obsolescence of the plants, however built. The race between the short economic life of a plant and the continuous application of new technical discoveries constitutes a permanent threat to the process of amortization of a plant.

In recent years it seems that the rapidity of the business cycle surpasses the adaptability of the plants. Thus the problem remains whether it is still economically possible to amortize some of the large plants used in modern mass production, even though intended for a specially short life. It would thus appear that the problem cannot be solved short of instituting a comprehensive system of industrial planning.

FAUSTO R. PITIGLIANI

ROSE, J. R. *Public utility regulation in Pennsylvania.* A dissertation. (Philadelphia: Univ. of Pennsylvania. 1939. Pp. viii, 172.)

This is a study of regulatory policy development by the Pennsylvania Commission since its inception in 1913. It depicts the scope of regulatory authority and traces the Commission's policy on the rate base, the rate of return, depreciation, security issues, and accounting.

From his examination the author concludes that the Commission "has not followed a policy based upon economic considerations of any kind." The primary basis for this criticism is that, in exercising its powers with respect to depreciation allowances and the return to capital, the Commission apparently

has taken little cognizance of the fact that public utilities must compete with other industries in securing their capital. Furthermore, he feels that the constant search for new methods of control (such as informal conferences, temporary rate orders, and new accounting systems) seems to indicate that regulation in Pennsylvania has not been particularly effective, although the results, in quality of service and level of rates, probably have been as satisfactory as in most other states.

Pursuant to a 1937 statute the Commission was entirely replaced. Some of the powers granted to the new Commission, it is held, are unnecessary to the performance of purely regulatory functions. The power to prohibit any expenditure which the Commission considers excessive, for instance, constitutes an invasion of the managerial field.

In a rather sketchy theoretical excursion the author contends that the return to capital should be determined by applying to a reproduction cost rate base a rate of return comparable to the yield (*i.e.*, the ratio of earnings to market price) on the securities of unregulated industries. This controversial subject involves so many considerations, both theoretical and practical, that brief treatment can hardly be expected to do it justice. In any case, such a definitive conclusion is scarcely necessary to the support of the general thesis.

ROBERT W. MAYER

WHITE, L. H. *Money economy by an engineer.* (Birmingham, Ala.: Birmingham Printing Co. 1939. Pp. v, 132. $3.)

"Personally, while I do not consider capitalism an ideal political economic order by any means, still with human nature such as it is, I believe it to be the best practical system for governing most of the economic transactions in a democratic state. I also believe the collapse of our former economic order was caused by a pre-depression drift into socialism."

Illinois Commerce Commission: twenty-second annual report, July 1, 1938, to June 30, 1939. (Springfield: State of Ill., Centennial Bldg. 1939. Pp. 232.)

Deals with the regulation of public utilities.

Labor and Labor Organizations

Organized Labour in Four Continents. By H. A. MARQUAND and Others. (New York: Longmans Green. 1939. Pp. xiii, 518. $4.00.)

This book contains eleven essays by eleven authors on organized labor in thirteen countries. Eight of these countries are in Europe: France, Germany, Great Britain, Italy, Norway, Sweden, Denmark and Soviet Russia. America is represented by the United States, Canada and Mexico; Australasia by Australia; Asia by Japan. The period studied covers the "years that have elapsed between the signing of the Peace Treaties of 1919 and the destruction of trade unionism in Germany, Austria, Czecho-Slovakia and Spain . . ." (p. v).

The subject matter of the book is more comprehensive than its title would suggest. Each essay is a narrative and interpretative study, not merely of organized labor, but of labor in its broadest implications. In addition to an account of trade-union membership, industrial disputes, wage legisla-

tion, and the like, there is also—as illustrated by Professor Marquand's chapter—a discussion of such matters as price movements, changes in the course of foreign trade, budget difficulties and reparations payments. The authors proceed, and properly, on the assumption that labor developments can be understood only against the institutional background of which they are a part.

Some of the conclusions reached in this book may be mentioned here as indicative of the nature of labor problems in particular countries. Professor Philip states rather optimistically: "French trade unionism is moving in a new direction. No longer does it adopt a truly negative anti-state attitude of pre-war days" (p. 59). Professor Roll views the collapse of a pre-trade union movement in Germany and believes that its revival is conditional on "the disappearance of a totalitarian regime" (p. 116). Dr. van Aartsen, writing as a resident of Italy, believes that the influence of the working class has increased since 1926; but he adds that a worker "may bring forward his wishes only through the official channels, and his association, before backing his desires, will first see that their fulfilment does not harm production as a whole" (p. 227). Professor Perlman, deeply concerned about the civil war in American labor, believes that "the future of American labor may be decided by the speed with which the breach in its economic organization will be repaired" (p. 399). The characteristic feature of the labor situation in Japan, according to Dr. Ayusawa, is the small percentage of organized workers—6.2 per cent in 1937. Mr. Ross, writing about Australia, suggests that a labor-controlled government, like any other, will be defeated if in power during a depression "because the people place on such governments the responsibility of failing to solve the crisis without lowering standards" (p. 475). Probably no one will agree wholeheartedly with all the conclusions stated in this volume. But it is apparent that the authors were, in the main, objective and painstaking in their analysis.

Some readers may be disappointed that no attempt was made to integrate the contributions of the several authors. The volume invites its readers to visit many countries, offers in each an expert guide, but provides no help for the traveler who is searching for similarities and differences between them. Professor Marquand, as general editor, thought it unwise to undertake "an impossible synthesis." As a result, while each essay in the book has merit, all of them put together have a total merit less than the sum of their parts. It would have been desirable, in this reviewer's opinion, had certain underlying trends been noted as characteristic of individual countries, and yet overlapping several. By such treatment the problems of labor could be better visualized as cutting across political boundaries.

HARRY HENIG

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Social Change and Labor Law. By MALCOLM SHARP and CHARLES O. GREGORY. (Chicago: Univ. of Chicago Press. 1939. Pp. vii, 175. $2.00.)

To the labor economist, the six lectures by these associate professors of law represent an interesting shift in emphasis in the training of law students and law faculty. Mr. Sharp deals with "Society and the law," developing the theme of responsibility as it relates to property. The main problem is that of adjusting the minds of parties to litigation and of decision-makers in private business to "new notions of responsibility, particularly the responsibility of the relatively rich to the relatively poor . . . ," notions brought about by social change.

His second lecture poses for discussion the reflection in constitutional decisions of ideas about social and economic organization. Will old ideas of "contract" be modified to give judicial sanction to a system of individual enterprise and free competition in trade or to one of "monopoly and regulation in trade" plus government operation?

Private right and public power are issues. Philosophizing on these problems leads to crystal-clear passages concerning the rôle of the industrial corporation as a governing agency. Documentary evidence of a changing social philosophy of business managers is given; a fiduciary relationship is indicated with workers' rights receiving growing attention. Mr. Sharp suggests the need for some practical adjustment of the relation of the large industrial corporation to the democratic federal state.

Mr. Gregory's three lectures discuss succinctly, and at times picturesquely, the general theme of "Government control of labor disputes." American practice is differentiated from English as it stems from the "Common law" (lecture 1); nowadays English law reports only rarely contain decisions concerning labor disputes. Trade-union cases are usually suits on collective agreements or are similar to ordinary civil litigation.

Striking phrases dot the pages and express his dissent from "widespread judicial antipathy to union objectives" (p. 146). A "question begging maxim . . . that intentionally inflicted harm is actionable unless justified" is harpooned by his dictum, "Justification depends largely upon the judges' social and economic predilections" (p. 93). In spite of Justice Shaw's decision in Commonwealth *versus* Hunt, Gregory says that the judiciary did not surrender to labor unions but spent the next forty years developing new weapons. Union pressure to extend power through wider and closer organization was offset with the labor injunction.

Traditional judicial reaction to particular union practices is subjected to analysis and lampooning; he suggests giving the "economics of negotiation" a trial so that industrial disputes will become a thing of the past. Signs of the times indicate some tendency for the judiciary to recognize the objectives of organized labor even in the absence of legislation.

Lecture 2 enlarges upon labor's heavy burden under both the Sherman and the Clayton acts but introduces the Norris-LaGuardia act as *deus ex machina.* Anti-injunction laws are represented as a step toward "achieving the legality of non-violent, non-fraudulent, and non-libelous labor practices for all general purposes" (p. 143). Although organized labor's own coercive program met with opposition in many courts, some justices indicated possible legislative relief.

The final lecture portrays congressional efforts to attenuate the explosive force of labor disputes by sublimation. Legislative guaranties to secure labor's right to organize and to negotiate collective agreements (which are treaties rather than contracts) are part of a new governmental policy enunciated alike in the Railway Labor act of 1926 ("as overhauled in 1934"), and in the National Labor Relations act. The legal and administrative problems involved in the latter Act receive bold and imaginative treatment in Professor Gregory's final chapter. Employers' fears that collective agreements will result in an organized control of employment must be dissipated by mutual efforts to help the Board make the Wagner act work. Failure in this direction means a resumption of labor disputes—a calamity the community should avoid. Labor will not down. If coercive self-help is not replaced by legal recognition of the desirability of peaceful and rational methods of achieving organization and collective bargaining, labor will resort to politics. It is predicted that social danger might result if unions become powerful politically as well as economically. The book concludes: "We stand on the sidelines, some proclaiming, many dreading, the day when labor unionism becomes of age." Economists should read these lectures to find out how a new generation of lawyers can be taught to be economic realists.

ALBERT T. HELBING

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Strikes: A Study in Quantitative Economics. By JOHN I. GRIFFIN. (New York: Columbia Univ. Press. 1939. Pp. 319. $4.00.)

Like previous writers on strikes in the United States, the author has available detailed federal figures for 1881-1905 and for 1915-1937, which were recently printed as Bulletin 651 of the Bureau of Labor Statistics. The gap of nine years, which Hansen tried to close by using Canadian data, Dr. Griffin closes by gathering figures from the seven states for which they are available and which contained nearly half of the country's strikes. He finds the Massachusetts records especially detailed, gives them extended study and prints them in the appendix.

Dr. Griffin discusses the data in many aspects. He notes major peaks in 1919 and 1937, when the unionizing process had been fostered by the "political climate." But he does not stress the major peaks of strikes in

1886 and 1907, which followed waves of unionization not favored by "political climate." It is true that, in terms of numbers of workers involved, 1886 and 1907 were not very big years, but in number of strikes 1907 is close to 1919 and the strike-record of 1886 looked very big at the time, when unionism was young.

All these peaks were made possible by favorable business conditions, as were the smaller rises. Dr. Griffin finds a strike cycle averaging 3.3 years. (It would be 3.6 if 1930-38 were included as the most recently completed cycle.) The peaks came at about the same time as business peaks did, often a little after. Belated strikes, after a business downturn has taken place, are likely to be lost. Perhaps so many have been called because unions until recently have not kept close track of business fluctuations, or because accustomed rates are looked on as just rates and therefore proposed cuts must be resisted. Later, in the depression, there may be strikes of desperation. But mostly despair is stored up to be expressed at the next business upturn. As stated in the preface of Bulletin 651, "Strike statistics can never exactly measure industrial unrest."

In making this cycle study the author compares the strike figures with the ups and downs of wholesale prices. He would have done better to use employment or output figures; when orders and employment fall off the employer is less in need of the employees. Dr. Griffin preferred to take wholesale prices as representing "the cycle" because employment and output are dependent variables, being themselves affected by strikes.

Do strikes reduce employment and output a great deal? This problem is important in itself and incidentally the answer to it might help decide the "dependent variable" question. The author points out (when he notes that the importance of strikes cannot be judged by the usual pro-rata estimates of lost wages and profits) that, in some cases at least, lost output is made up after the strike. Perhaps in some cases orders are taken over by other employers. If so, total output is not greatly affected by strikes. He suggests, however, that the prevalence of strikes at the peak of business may mean that they disrupt the productive scheme or the expectation of profits and help cause the downturn. Apparently there is not quantitative evidence on these points.

After a union becomes a settled part of an industry, strikes may be less frequent because both sides should be able to estimate the economic situation better than before and agree on terms instead of suspending operations; neither side has to prove its potency to itself or to its opponent. Dr. Griffin considers this possibility. One gathers from his figures that, on the whole, labor in the United States is still not past the organizing phase; for, though "strikes called by unions" are becoming a larger part of the total, this category is nearly half made up of "organizing" strikes, that is,

strikes by unions not yet established. Though industries with a long experience of unionism have in general high strike levels, yet the experience of individual industries varies widely. The author hazards that in the future more and more of them may fall into the pattern of the railroad industry, with governmental intervention, or of the printing industry, with private arbitration—and thus become outwardly more peaceful.

The official reports (after useful simplification by Dr. Griffin) present us with a division of strikes into those for wage increases, against wage decreases, for hours reasons, and for other reasons (especially organization). In the war years, the reports show, the first cause rose sharply, hours dropped markedly in importance, and "others" also dropped. Dr. Griffin explains that "hours" were not important because men wanted to work long hours and earn bonuses. Yet we know that average hours fell six per cent between 1914 and 1920 and that collective bargaining had much to do with it. The proportion of organizing strikes is reported to have dropped in the war years, or not to have increased. Yet union membership doubled; employers who had never dealt with unions did so—after a strike. The author himself supplies many other cases in which the figures must be checked by other knowledge.

CARL RAUSHENBUSH

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Technology and Labor: A Study of the Human Problems of Labor Saving. By ELLIOTT DUNLAP SMITH in collaboration with RICHMOND CARTER NYMAN. (New Haven: Yale Univ. Press. 1939. Pp. xiv, 222. $2.50.)

The hidden costs of labor unrest which fall daily upon industry and community are not included in the "labor costs" of production (wages only), and yet they are a substantial part of the expense of employing labor. If they could be calculated, the problems which confront the National Labor Relations Board and all who are involved in industrial relations would appear even more imperious than they do today. Given the best known mechanical instruments of production, the way workers feel and think about their work is a force of great potentiality in an industry's organization. Unit costs are driven down or up according to whether this force is constructive or corrosive. "Speeded up" by a conveyor belt, or given large new work-loads with inadequate technological support, workers are disconcerted and resentful. This is not only because habits have been sharply disrupted, but also because standards of living and family relations are affected; because the whole psychology of workers changes. Frederick Taylor said that the reason for resistance by labor is the responsibility of management. Without the principles of scientific management, industry could not have advanced to its present plane of production. But without

application of these principles on the human side, further advance becomes ever more precarious.

This volume is of high importance because it develops these principles and their application in dealing with the human problems of technological change. Almost the only book of this kind, it is concerned with "labor technology" which gets more work out of labor, rather than with the more familiar "machine technology" which increases the efficiency of the machine. It is an authoritative report of years of scholarly case study and interpretative analysis of labor saving in 18 cotton textile mills, presented by a brilliant teacher.

Although the mechanization of modern cotton manufacture began some 40 years ago and was completed soon after 1920 with automatic shuttle-changing, it was not until the depression of that year that the mills turned to the scientific use of the looms. In some well-managed mills, engineering principles guided in smoothly and successfully the "multiple-loom" or "extended-labor" system, by which a weaver could take care of many more looms than before by being relieved of much of his former work. But because the formulas were misapplied in many mills by a sudden and technologically unprepared extension of the weaver to tend as many as 72 looms, labor dubbed the process the "stretch out," and experience was bitter and costly.

Briefly the installation proceeded as follows: each preliminary condition and process was examined and gradually perfected, from raw cotton purchased to warp finishing and shuttle winding. Weaving labor was then functionalized, as Taylor functionalized management. Better quality of shuttle yarn and of warps reduced loom stoppages so the weaver could take over a greater number of looms. This gave him more unskilled than skilled work to do—more looms to clean and batteries to fill than "ends down" to tie in. Consequently, boys, girls and women were taken on as unskilled "specialists" to help the weaver operate his looms. Now deprived of his traditional sovereignty, the weaver was kept walking on a precisely scheduled beat. He repaired stopped looms only as he came to them, being required to disregard those off his route as well as to restrain himself from interfering in delays and errors caused by his unskilled associates; for these were the new responsibility of management.

Labor unrest hovered over this installation from seven main causes: (1) interference with habit; (2) destruction of independence; (3) increased strain of concentrated tasks now unrelieved by routine tasks; (4) the changed nature of the job which required different physical and nervous faculties, *e.g.*, strength to doff rolls of cloth was no longer needed, but strong arches for constant walking were essential. Although accustomed to the frailties of his looms, the weaver's self-control was now also tested by the frailties of the specialists. (5) Demotions, which greatly exceeded discharges, the actual number of weave-room workers remaining nearly

the same as before. In one mill, skilled weavers were reduced from 80 to 48 per cent of the total force in the weave-shed; in another, from 62 to 45 per cent; in another from 78 to 69 per cent. For the industry as a whole, 1923 to 1930, the percentages of weavers to all operatives fell from 27 per cent to 19 per cent. (6) Lower average wages. Although some mills increased weavers' average wage from $17.50 to $20.65 per week, and a few raised relatively the wages of all affected workers, "in only one did this make up for the loss in earnings due to the higher proportion of low-paid work." In one mill, where wages were raised all round, the increase in the proportion of unskilled workers from 20 to 52 per cent caused the average wage of all loom workers including weavers to fall from $16.20 to $15.38. Moreover, all knew that wage increases were "merely temporary in effect," because in time they would be affected by general market conditions. In one of the few mills where data were existent, the proportion of girls 14 to 18 years of age rose from 25 to 50 per cent of all weave-room workers. (7) The financial investment required to stretch a weaver over more looms, without laying the technological foundation necessary for ultimate success, was so small that it acted as an incentive to make the experiment, rather than as the deterrent which a large initial outlay for machinery tends to supply.

To reduce labor unrest, the successful mills buttressed morale by strengthening the confidence of the workers in the aims and methods of their procedure. Control records were set up and remedies applied promptly in case of overstrain. A burden-of-work index (number of times per hour that a loom stopped) was an objective safeguard which could be written into an agreement. "Nearly every successful mill . . . made the continuance of the enlarged work assignments contingent upon the maintenance of loom stoppage below a specified level," reports Dr. Smith. Work assignments were thus reduced in some cases, while in others they could be increased "after management and employees became accustomed to the new situation." But low loom stoppage had also to be weighed against counteracting conditions such as longer distance to walk, poor floors, better quality of cloth required, less reliable bobbin and cleaning service; so that "one mill not only made loom-stoppage tests at regular intervals and on every set of looms in turn, but always made them with an employee observer." In one mill, assignments were retained only if technicians, executives, and workers agreed that they were "right."

By ingenious methods, sequence and *tempo* of change were studied, and the results divided into those which affected the economic welfare of the mill and those which affected labor. All material was gathered by first-hand observation and interviews at the mill. Mill records and cost accounts were examined; also the records of unions if they were available.

ELIZABETH F. BAKER

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NEW BOOKS

BENHAM, E. D. *The woman wage earner: her situation today*. Bull. of Women's Bur. no. 172. (Washington: Supt. Docs. 1939. Pp. v, 56. 10c.)

CARSEL, W. *A history of the Chicago Ladies' Garment Workers' Union*. (Chicago: Normandie House. Pp. 347. $2.50.)

COOKE, M. L. and MURRAY, P. *Organized labor and production: next steps in industrial democracy*. (New York: Harper. 1940. Pp. x, 277. $2.50.)

CREAMER, D. and COULTER, C. W. *Labor and the shut-down of the Amoskeag Textile Mills*. Rep. no. L-5. (Philadelphia: WPA, Nat. Research Project. 1939. Pp. xxii, 342.)

JAEGER, W. H. E. *Cases and statutes on labor law*. (Rochester, N.Y.: Lawyers Co-op. Pub. Co. 1939. Pp. 1124. $6.50.)

JOHNSEN, J E., compiler. *The National Labor Relations act: should it be amended?* (New York: Wilson. 1939. Pp. 416. $1.25.)

KNOX, J. C., and others. *Comments on labor courts*. (Bronx: Louis Kirshbaum. 1939. Pp. 20.)

McDONALD, D. J. and LYNCH, E. A. *Coal and unionism: a history of the American coal miners' unions*. (Silver Spring, Md.: Lynald Books. 1940. Pp. 226. $2.50.)

MARIANO, J. H. *The Busch Jewelry Stores labor injunction*. (Boston: Christopher Pub. House. 1940. Pp. 238. $2.50.)

MITCHELL, E. M., compiler. *The Public Contracts (Walsh-Healey) act: selected references*. (Washington: U. S. Dept. of Labor Library. 1940. Pp. 13.)

PELL, O. *Supplement to the annotated list of pamphlet material for workers' classes*. (New York: Am. Labor Education Serv. 1940. Pp. 15.)

ROTH, A. E., and others. *Employer associations in collective bargaining*. Personnel ser. no. 37. (New York: Am. Management Assoc. 1939. Pp. 27. 50c.)

SAPOSS, D. J. and DAVISON, S. *Structure of AFL unions*. Res. mem. no. 8. (Washington: Nat. Labor Rel. Board. 1939. Pp. 12.)

SNYDER, E. M. *Job histories of women workers at the summer schools, 1931-34 and 1938*. Bull. of Women's Bur. no. 174. (Washington: Supt. Docs. 1939. Pp. vii, 25. 10c.)

STARNES, G. T., and others. *A survey of the methods for the promotion of industrial peace*. (Charlottesville, Va.: Bur. of Public Admin. 1939. Pp. 146. $1.)

TERRY, J. W. *American labor and the trade agreements*. (Des Moines: Econ. Policy Committee. 1939. Pp. 30. 10c.)

WHITE, K. *Labour and democracy in the United States*. (Liverpool: Univ. Press of Liverpool. 1939. Pp. xi, 381. 12s. 6d.)

WINSLOW, C. M. and CLARK, K. R. *Profit sharing and pension plans: their creation and tax effect*. (Chicago: Commerce Clearing House. 1939. Pp. xiii, 192. $2.)

This volume should prove of inestimable value to corporation executives who have in actual operation or contemplate the establishment of profit sharing and pension plans for their employees. The authors at the outset establish the thesis that both employers and employees are generally agreed that profit sharing is conducive to profit making. This is particularly true where deferred distribution of profits rather than immediate distribution is practised.

Among some of the advantages of deferred distribution schemes discussed

by the authors are the decrease of corporate income and profits taxes without a decrease in net income in prosperous years; tax saving for employees, especially those in the higher income brackets; use of the deferred profit sharing fund during depressions for loans to employees; and the possible conservation of capital through the investment of part of the fund in securities of the employing company. Attention is also given to possible tax economies with reference to state and federal inheritance and estate taxes, state income taxes, and other local levies affected by earnings.

The authors present a practical and detailed analysis of the more desirable or necessary features of a profit-sharing plan on the deferred distribution basis. This analysis is followed by a number of well known corporate plans actually in operation.

Section 2 of the volume is devoted to the legal phases of the various tax factors involved in profit sharing and pension schemes. Thus there is an extended sketch of the statutory provisions of the federal income tax laws, social security tax regulations and others. A further valuable contribution of this work is found in an outline of conditions necessary for the creation of a valid employees' trust.

EARL E. MUNTZ

WOYTINSKY, W. S. *Additional workers and the volume of unemployment in the depression.* Pamph. ser. no. 1. (Washington: Soc. Sci. Res. Council, Committee on Soc. Security. 1940. Pp. vii, 37. 50c.)

Dominion of Canada: report of the department of labour for the fiscal year ending March 31, 1939. (Ottawa: H. M. Stationery Office. 1940. Pp. 111. 25c.)

Employers' digest of the Fair Labor Standards act of 1938. (Washington: Supt. of Docs. Pp. 6.)

Employment, wages and international trade. Stud. and rep., ser. B, no. 32. (Geneva and Washington: Internat. Labour Office. 1940. Pp. 107. 75c.)

International Labour Conference: twenty-fifth session, Geneva, 1939. Record of proceedings. (Geneva: Internat. Labour Office. 1939. Pp. xxx, 670.)

Labour organization in Canada: twenty-eighth annual report for the calendar year 1938. (Ottawa: Dept. of Labour of Canada. 1939. Pp. 256. 50c.)

Labour, the war, and the peace: a declaration of policy by the national executive of the British Labour Party, February 9, 1940. (London: Labour Party. 1940. Pp. 9. 1d.)

List of references on National Labor Relations Board, October, 1939. (Washington: Nat. Labor Relations Board. 1939. Pp. 26.)

National Labor Relations act. Hearings part 24. (Washington: Senate Educ. and Labor Committee. 1940. Pp. 4635-4770. 15c.)

National Mediation Board: fifth annual report, including the report of the National Railroad Adjustment Board, for the fiscal year ended June 30, 1939. (Washington: Supt. Docs. 1939. Pp. v, 91. 20c.)

Standards for employment of women in industry. Women's Bur. bull. no. 173. (Washington: Supt. Docs. 1939. Pp. 8. 5c.)

Trade union facts. (New York: Internat. Pubs. 1939. Pp. 124. 25c.)

Women at work: a century of industrial change. (Washington: Supt. Docs. 1939. Pp. iii, 80. 15c.)

Money, Prices, Credit, and Banking

Golden Avalanche. By FRANK D. GRAHAM and CHARLES R. WHITTLESEY. (Princeton: Princeton Univ. Press. 1939. Pp. xv, 233. $2.50.)

Only ten years ago many economists were greatly concerned about a gold *shortage.* Kitchin had made his study forecasting a world-wide decline in commodity prices because a decrease in the production of gold was inevitable. Other studies published by the League of Nations supported this point of view. Many believed we were approaching a period similar to the years 1873 to 1898.

In 1930 it was common to blame the rapid decline in commodity prices upon the scarcity of gold. In fact, a number of British economists were certain that this was one of the major causes of the depression then well under way. Most American economists, however, emphasized a maldistribution rather than an actual shortage of gold. For, by August, 1931, our gold stock had grown to five billions, the largest store of that metal in our entire history.

While Britain was still worried about a gold shortage, American economists became likewise worried, but because of the rapidity with which gold was coming to our shores. The late James Harvey Rogers expressed his fears in *America Weighs Her Gold.* In 1940, we have thirteen billions more gold than in 1931 and it is still flowing in. One wonders why we were so greatly exercised over a mere five billion.

To Graham and Whittlesey this golden avalanche has presented us with a problem of the first magnitude. Devaluation, early in 1934, raised our stock of gold from four billion to approximately seven billion overnight, but eleven billion more have been added in just six years. In 1939 alone we imported three and one-half billion. For this situation, say the authors, our policy of freely buying gold at a high fixed price is primarily responsible. Our silver buying policy has been roundly condemned, and justly so. But, practically every argument that has been directed against our silver policy can also be used against our gold-buying policy. Strangely enough, however, our gold policy has brought little public condemnation.

The authors summarize the causes of the gold flow to the United States as follows: (1) Our gold purchase policy. (2) General uncertainty and fear on the continent of Europe, inducing a flight of capital to the United States. (3) Absence of the automatic corrective adjustments (such as a rise in our price level) traditional to the old international gold standard. Gold is now divorced from any direct connection with the pricing mechanism. It has ceased to be a regulator of international economic relations. Therefore "imports of gold to any country willing to buy it in unlimited amounts may continue indefinitely" (p. 50).

How have we paid for this gold? The two most important sources have

been the sale of goods and capital operations. But, with respect to the sale of goods, it might be argued that the goods have paid for the gold instead of merely considering the gold as payment for goods. Capital operations may be summarized under three headings: (1) Foreign investment in the United States; (2) earmarked gold; and (3) repayment of American investment abroad. It is not generally realized that as the result of these capital movements this country is being rapidly forced into a *debtor* position on international account. In short, we are no longer the great lending nation that we are generally assumed to be.

Certain economists have stated recently that most of our troubles would be over if only we should return to the gold standard. It may surprise them, therefore, to find Graham and Whittlesey arguing that our present appalling situation is largely due *to our return to gold* in 1934 (while the rest of the world stayed off) at a high fixed price for that metal (p. 78). This, in their opinion, was a great mistake, but it was due largely to pressure from conservative business-men and bankers. "It is somewhat ironical that the 'friends' of the gold standard are proving to be the greatest enemies of the standard they favor. They are largely responsible for the position in which we now find ourselves. . . . Whether we should or should not have devalued the dollar in terms of gold is perhaps an open question, but once having broken the link between our currency and gold we should have been in no hurry to go back alone" (p. 79).

The main beneficiaries of our present policy have been the producers of gold, who have been paid a handsome bonus for burying us under a golden avalanche which is more of a threat than a benefit to us. Their profits have been large because the cost of producing gold has risen very little, while the price jumped from $20.37 to $35.00 an ounce. Economically, these benefits have gone "to almost every country but our own" (p. 110). The chief beneficiaries are those countries opposed to Germany. Therefore, we are really helping them. "A strong case can be made for our gold policy . . . on these purely political grounds" (p. 112). Unfortunately, it has also helped Japan.

The authors have little faith that the problem will cure itself automatically. Certainly, gold-producing countries are not going to discourage the further mining of gold. If it is asserted that the cost of producing gold will eventually rise and make gold mining less profitable, it must be realized that it would require a great inflation to bring this about. There is little hope that the gold tide may turn outward again because of a large increase in our imports or foreign loans.

A serious threat in the present situation is the danger of inflation. Our excess reserves, much of which arose from gold imports, make a huge expansion of bank credit possible. Therefore, it might be wise seriously to consider putting gold certificates in circulation again (p. 146). Also, the

board of governors of the federal reserve system should be given the power to increase reserve requirements at will. Otherwise, they are almost powerless to prevent a bad inflation under present conditions (p. 155). A return to the gold sterilization policy of 1936 to 1938 on future imports would help. But since it would constitute a serious addition to the budget it is probably politically impossible.

Reducing the price of gold might be the best remedy. It need not lead to a price collapse. It need not cause a real loss, since the real loss has already occurred. But, psychologically, the result might be injurious. Probably neither political party would advocate it anyway.

In view of great political obstacles to most proposed remedies, the authors suggest a duty on gold imports as the way out. Let the internal price remain at $35 an ounce, but a tariff on imports could prevent any further large increments to our present stock. Accompanying this duty could be a bonus on gold exports. Chapters 10 and 11 present impressive arguments for abandonment of a fixed price of gold. Such a step need not necessarily bring great instability in exchange rates, and it would give us some control over our monetary destiny, a control we do not now possess.

Graham and Whittlesey have written a stimulating and thought-provoking book, one of the most important monetary tracts of our time. They leave us greatly in their debt. Many will not accept their conclusions. But, the reviewer finds himself in substantial agreement with the authors. They say this is only an interim, rather than a final, report. Regarding some of these problems and solutions they are still in doubt. We shall eagerly await further word from them regarding what should be done.

Those economists who are convinced that the solution to all our troubles lies in a return to the gold standard of 1914 may remain unconvinced. But the rapid course of monetary events may leave them far behind. For there are few signs that the major nations will return to the gold-standard-that-was in the near future. The present war may postpone any such plan indefinitely. What will follow the conflict in Europe is impossible to foretell. Problems of such magnitude may arise that the question of monetary standards may descend to the status of a mere detail. Whatever these problems are, they will not be solved by those economists who have learned nothing since 1914.

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NEW BOOKS

ARNDT, E. H. D. *The South African mints*. Pubs. ser. no. iii, arts and soc. sci. no. 9. (Pretoria: Univ. of Pretoria. 1939. Pp. vi, 115. 3s. 6d.)

BASU, S. K. *Industrial finance in India: a study in investment banking and state-aid to industry, with special reference to India.* (Calcutta: Univ. of Calcutta. 1939. Pp. xvii, 436.)

BRADFORD, F. A. *The legal status of branch banking in the United States.* (New York: Am. Economists Council for the Study of Branch Banking. 1940. Pp. 32.)

BRADY, J. E., compiler. *Banking Law Journal digest: a classified digest of legal decisions published in the Banking Law Journal, from the time of its foundation in 1889 to January, 1939.* 5th ed. rev. (Cambridge: Brady Pub. Corp. 1939. Pp. 824. $6.50.)

COMINOS, A. Z. *Die Währungs- und Kreditpolitik der Bank von Griechenland.* (Berlin: Junker und Dünnhaupt. 1940. Pp. 195. RM. 8.)

EDWARDS, G. *How banks lend.* (New York: Am. Bankers Assoc. 1939. Pp. 19. 25c.)

FOSTER, W. T. *Loan sharks and their victims.* Public Affairs pamph. no. 39. (New York: Public Affairs Comm. 1940. Pp. 31. 10c.)

GILBERT, M. *Currency depreciation, 1929-1935.* A dissertation. (Philadelphia: Univ. of Pennsylvania. 1939. Pp. xiii, 167.)

The author examined the exchange depreciation of Australia, England, Sweden and the United States with the purpose of showing the variety of causes and effects of depreciation, and also of assessing the significance of exchange manipulation in monetary policy. The countries chosen represent different types of experiences, Australia being an agricultural country, England being an important financial center, Sweden being a nation that left the gold standard simultaneously with England, and the United States being a nation that maintained gold parity until 1933.

The world-wide deflation was responsible for Australia's difficulties, because it expressed itself in a drastic decline of export prices and closed the sources of foreign credit to which the economic life of Australia had become adjusted. The relative rigidity of prices of manufactured products (which constituted Australia's imports) when balanced against the falling prices of exports (chiefly agricultural products) resulted in a severe disequilibrium in the balance of payments. Equilibrium could be restored only by internal deflation or depreciation.

In the case of Great Britain, the over-valuation of sterling from 1929 to 1931, and the liquidation of foreign balances that accompanied the international financial crisis in 1931, caused the suspension of gold payments. The internal effects of depreciation were beneficial in two ways: first, by relieving the flight from the pound, and second, by correcting over-valuation, thus allowing monetary expansion to relieve the depressed economic situation.

Sweden, being to a significant degree economically dependent upon Great Britain, was subjected to a drain of funds when England abandoned gold payments. The author concluded that had sterling not depreciated there is little reason to believe that the krona would have depreciated.

The United States deliberately devalued the dollar in order to aid the internal economic situation, thus introducing a new monetary policy. The depreciation in the United States was of doubtful value because it could not bring the desired rise in the general price level; and, although it contributed to the rise of import and export prices, it alone is not sufficient to explain the rise which did occur. Furthermore, the depreciation led to a large inflow of gold and short-term funds which became embarrassing at home and deflationary abroad.

The author concludes that depreciation is in the first instance an inflationary influence in the country that depreciates, but that the significance of this influence will vary according to the magnitude of the depreciation, the significance

which export trade has in the internal economy, and the importance of the depreciating country in world trade.

RUSSELL M. NOLEN

GROBBEN, M. *Industrial banking: a phase of consumer credit.* (New York: Consumer Credit Inst. of America. 1940. Pp. ix, 116. $1.50.)

HELM, F. *Banking developments in Missouri, 1920-1936.* (Sedalia, Mo.: Missouri Bankers' Assoc. 1939. Pp. 128. $2.)

KEMMERER, E. W. *The gold standard—its nature and future.* Address before the Connecticut Econ. Council, Hartford, Jan. 15, 1940. (New York: Economists' Nat. Committee on Monetary Policy. 1940. Pp. 18.)

LESTER, R. A. *Monetary experiments: early American and recent Scandinavian.* (Princeton: Princeton Univ. Press. 1939. Pp. xvii, 316. $3.50.)

This is a readable account of a number of instances in which unorthodox monetary measures appeared to produce good results, and of several cases in which *orthodox* monetary procedures appeared to produce bad results. The successful experiences consisted chiefly of inconvertible paper money issues in Colonial America and the recent and current experiment with a managed currency in Sweden. In contrast, the bad results of orthodoxy are illustrated by the severe business depressions that accompanied the policy and process of regaining the pre-war gold values for their currencies by Norway and Denmark in the period 1925-1928.

The moral of Professor Lester's book is introduced in his preface and is generously reiterated in each of the eleven chapters: orthodox monetary procedures are often either inadequate or positively vicious in their effects, and more flexible monetary policies, particularly expansionist procedures during business depressions, are needed.

Excessive issue and severe depreciation attended the paper money experiments of some of the American colonies, particularly those of New England and the South, which printed large quantities to pay military expenses. But Professor Lester's exposition of the favorable results achieved for considerable periods by French Canada and by Pennsylvania, New Jersey, and other of the middle colonies through the use of paper money to supply deficiencies in the physical means of payment, to finance government loans to citizens, to reduce interest rates, and to help overcome business depressions, provides a good corrective for the traditional categorical condemnation of such currency. Likewise, Professor Lester's discussion of the recent Swedish experience is a valuable corrective for some of the popular accounts which ascribe far more singleness of purpose and deliberateness of technique to the Swedish monetary policy than it has merited.

Despite his repeated and strong criticisms of monetary orthodoxy, Professor Lester is surprisingly orthodox himself in his concept of monetary forces. His principal emphasis throughout is upon mechanical monetary measures. The important monetary effects of governmental budgets, private investment activities, and similar factors, which have been increasingly prominent in the thought of modern monetary theorists, are given scanty attention. The Swedish "cyclical budget" idea which, as expounded by Professor Myrdal has aroused considerable interest in this country for its monetary possibilities, is barely mentioned.

A few minor errors in the text are doubtless due to careless proof-reading, but the author surely merits at least mild censure for uncritically presenting

from a secondary source a table purporting to show the percentage depreciation of colonial currencies in terms of the British pound sterling, in which the figures for depreciation include such mathematical impossibilities as 295 per cent, 463 per cent, 950 per cent, etc.

A large part of the material in the book has appeared previously in article form. Much of chapters 3, 4, 5, and 9 was published in the *Journal of Political Economy,* and portions of chapters 10 and 11, in *The People's Money.* Part of chapter 10 also appeared as a supplement to the Svenska Handelsbanken's *Index.*

LAWRENCE H. SELTZER

SOUTHARD, F. A., JR., and others. *Foreign exchange practice and policy.* (New York: McGraw-Hill. 1940. Pp. ix, 215. $2.50.)

SPAHR, W. E. *The case for the gold standard.* (New York: Economists' Nat. Committee on Monetary Policy. 1940. Pp. 35.)

STOKES, M. L. *The Bank of Canada: the development and present position of central banking in Canada.* (Toronto: Macmillan. 1939. Pp. xii, 382.)

DE STRYCKER, C. *Les fonctions et les opérations de la Banque Nationale de Belgique de 1914 à 1938.* (Brussels: Goemaere. 1939. Pp. xxiv, 344.)

The history of the Bank of Belgium outlined in some 300 pages by Dr. Strycker was too broken by political events to serve as a good laboratory test of any banking theory. The outstanding impression left with the reader is that theory never caught up with fact and that the bank, in trying to formulate policy, was following rather than influencing events. From the occupation of the country by Germany in 1914—bringing a flood of marks to overwhelm the bank in its efforts at monetary stability—to the troubled pre-war period of 1938, the bank was being "reformed" and the franc devalued at a lower level every few years.

As a survey the book is competent and readable, but in seeking light on specific detailed relationships one looks in vain for a minute examination of some short phase to throw new light on the working of an attempt to reconstruct financial operation. The discussion of inflation, for example, is journalistic rather than scientific. Only around some relatively short episode could Dr. Strycker have explored the new notions of the economic rôle of a central bank. His failure to present such a searching analysis consigns his book to a group of other useful chronicles and gives the background of a stormy period of finance without indicating what lessons can be gained from the experiences outlined.

Granting the dominant rôle of international affairs over money and credit in Belgium, there should have been a discussion of Belgium's participation in the Bank for International Settlements, a more sophisticated discussion of the relation of the Belgian to the French franc, and further comment on the gold bloc and the London Conference of 1933. The usefulness of the information is limited also by the failure to indicate more definitely the relation to various types of private banks. This weakness is characteristic of much of the literature in the field but is none the less regrettable. There is still need for unbiased and scientific analysis of European central bank policy from 1920 to 1940.

ELEANOR LANSING DULLES

TIFFANY, M. E. *Retail food prices in relation to amounts, styles, and containers.* Bull. 448. (Burlington: Vermont Agric. Exp. Station. 1939. Pp. 51.)

VALLARINO, J. C. *Estudios sobre impuestos hipotecas y moneda.* (Montevideo: Impresora "Moderna." 1939. Pp. 225.)

————. *Moneda y patron monetario: doctrina y tesis.* (Montevideo: Impresora "Moderna." 1940. Pp. 271.)

WEISSMAN, R. L., editor. *Economic balance and a balanced budget: public papers of Marriner S. Eccles.* (New York: Harper. 1940. Pp. xxi, 229. $3.)

Material arranged chronologically, covering the period 1935-1939.

WILCOX, F. E. *A statistical study of credit unions in New York.* (Chicago: Univ. of Chicago School of Business. 1940. Pp. ix, 91. $1.)

Author is staff statistician of the Household Finance Corporation of Chicago.

WOOLLEY, E. S. *Bank management control.* (New York: George S. May Co. 1940. Pp. 152. $5.)

Barclays Bank, Limited: report of the forty-fifth ordinary general meeting held on 24th January, 1940, and statement of accounts as at 31st December, 1939. (London: Barclays Bank. 1940. Pp. 23.)

The Chase National Bank of the City of New York: the report of the chairman of the board of directors at the sixty-third annual meeting of shareholders, January 9, 1940. (New York: Chase Nat. Bank. 1940. Pp. 27.)

Il controllo dei cambi nei vari paesi. Quaderni ix. (Rome: Assoc. fra le Soc. Italiane per Azioni. 1940. Pp. 144.)

Foreign exchange regulations: Great Britain. (Basle: Bank for Internat. Settlements. 1940. Pp. 36.)

Prices in Canada and other countries, 1939. Issued as a suppl. to the *Labour Gazette,* Feb., 1940. (Ottawa: H. M. Stationery Office. 1940. Pp. 24.)

Reglementation du commerce des devises: France. (Basle: Banque des Reglements Internationaux. 1939. Pp. 43.)

Public Finance, Taxation, and Tariff

Government Price Policy in the United States during the World War. By HERBERT STEIN. (Williamstown: Williams Coll. 1939. Pp. viii, 138.)

In this compact little volume is given a critical survey of the government's methods of dealing with the complicated problem thrust upon it by our entrance into the war, of transforming quickly a peace-time economy into a war economy with as little disturbance as might be of the living standards of the community, and without unduly increasing current war costs or creating burdensome debt services on the return of peace.

Mr. Stein views his subjects broadly and because of the close relation between prices, money costs and the use of credit, both governmental and private, he reviews the policies adopted by the government of financing its own extraordinary operations and in controlling the use of credit for private enterprise. About one-half of the book deals with this aspect of his subject. No adequate preparatory study had been made by Congress or the Treasury for dealing with the intricacies of so great a financial undertaking, and it is not strange that policies were developed haltingly and that so little was done "to integrate the financing policy with the transformation" to be

made. On the mooted question of a drastic tax policy assisted by loans *versus* a strong loan policy supported by taxes, Stein is in accord with most economists of the war period. He recognizes, however, the difficulty of finding taxes which would not on the one hand be regressive and thus bear most heavily on those least able to carry, or, on the other, dry up the chief source of savings with which to buy the bonds necessary to supplement taxes. But "since a transference of income from individuals to the government had to be made in any case, there is no theoretical reason why, after a few months for new taxes to become operative, the transfer should not have been made by taxation instead of by the inflationary bond method."

Aside from the volume of bonds issued, the manner of placing them comes in for the most severe criticism. The Treasury took the more convenient and perhaps safer course from the point of view of successful flotation, of relying too much upon the banks, with the result of bank credit inflation. The large and progressive resort to Treasury notes in anticipation of bond sales is especially criticized for its inflationary effects. If the economic appeal to investors of a higher interest rate had been made, a far larger proportion of the bonds would have been paid for out of savings; and at the same time would in some measure have supplemented the efforts of the Capital Securities Committee to restrict investment in non-essential industries. The further suggestion is made that this latter objective might well have been furthered by some kind of tax on investment in non-essential industries competing with the government for capital and labor.

In the chapter dealing with direct price control, Mr. Stein gives an all too brief but sympathetic account of the evolution of the various agencies employed, especially of the Fuel Administration, the Food Administration and the War Industries Board. His conclusion is that: "Price control succeeded in its aims of reducing prices in so far as was compatible with the maintenance of production." There is a hint that the author is concerned over the prospect of an extension of peace-time price control, and he warns that: "Permanent peace-time price control can only operate as part of a system of more fundamental economic controls," resting on quite other assumptions than it has been necessary to consider when dealing with temporary price controls in time of war.

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NEW BOOKS

ALTMAN, G. T. *Introduction to federal taxation (1939 Act)*. 3rd ed., rev. and enl. (New York: Commerce Clearing House. 1940. Pp. 271. $2.)

BOWEN, H. R. *English grants-in-aid: a study in the finance of local government*. Stud. in soc. sci., vol. xi, no. 1. (Iowa City: Univ. of Iowa. 1939. Pp. 156. $1.)

Mr. Bowen's lucid and interesting monograph is an attempt to test the English system of grants-in-aid by the use of the so-called equalization criterion.

Defining the latter as "the equalization of financial resources and of access to governmental services" (p. 73), and interpreting this "to mean (1) that the extent and quality of each local service is *at least* up to a specified minimum standard throughout the country, and (2) that the burden of taxation *necessary to maintain this standard* is equal in all parts of the country" (p. 75), Mr. Bowen concludes that the results of the English experiments in this field are on the whole disappointing (p. 106).

A substantial portion of his monograph consists of a summary discussion of the nature of English local government, the historical development of English grants-in-aid, and the theoretical case for the equalization criterion. But these are well ploughed fields and Mr. Bowen can pretend to do little more than present in a lucid fashion a specific point of view. Consequently chief emphasis should be placed upon chapters 4, 5 and 7 in which the author tests statistically the alleged equalizing tendencies embodied in the reform of 1929.

On the whole his analysis of this difficult problem is clever and worthy of careful study. It would not be fair to berate him for assuming out of the calculation some of the more obvious imponderables such as the proper size of local government expenditures and the distinction between service rendered and money spent. Yet it would also be unwise to accept his analysis without recognizing the limitations to which it is subject.

The main point at which Mr. Bowen has left himself open to adverse criticism is in his handling of the inferences which might be drawn from his analysis of English experience with respect to the problem of American policy in this same field. Such inferences are particularly apt to be made in this case because of the similarity between Mr. Bowen's position and technique and those associated with the literature on the proposed federal grants-in-aid of education. The author has not been overly cautious in avoiding such inferences and yet does not enter into a detailed discussion of the validity of logic of this sort.

EUGENE E. OAKES

BRANNON, V. D. *State auditor and fiscal control in Missouri counties.* Univ. of Missouri stud., vol. xiv, no. 4. (Columbia: Univ. of Missouri. 1939. Pp. 106. $1.25.)

CHATTERS, C. H. and HILLHOUSE, A. M. *Local government debt administration.* (New York: Prentice-Hall. 1939. Pp. xii, 528. $5.)

CHISHOLM, L. L. *The shifting of federal taxes and its implications for the public schools.* (Madison, Wis.: Jour. of Experimental Educ. 1939. Pp. 84. $2.)

CLINE, D. C. *Michigan tax trends as related to agriculture.* Spec. bull. 301. (East Lansing: Michigan State Coll. Agric. Exp. Station. 1940. Pp. 88.)

CONNELLY, W. F. *Income tax manual for New York State, for residents and non-residents.* 1940 ed. (New York: Harian Pubs. 1940. Pp. 28. 50c.)

DURBIN, E. F. M. *How to pay for the war.* (London: Routledge. 1939. Pp. 119. 3s. 6d.)

GANTENBEIN, J. W. *Financial questions in United States foreign policy.* (New York: Columbia Univ. Press. 1939. Pp. xiv, 264. $3.25.)

As a narration of what has occurred in recent years in the fields of exchange control, intergovernmental debts, foreign dollar bonds, and international double taxation, the book serves a useful purpose for those who desire to keep abreast of a complicated and fast-moving subject.

It is pointed out that "the development of financial problems with respect to

foreign policy has, for the most part, been comparatively recent" (p. 3). Only in the past few years has the matter of defaults on foreign bonds floated in the United States become important, and it has been mainly the recent international chaos that has forced governmental credit agencies to give exporters the financial assistance that commercial banks fear to provide. The author proceeds to a recapitulation of the rather well known events leading to the breakdown of the international gold standard (chapter 2, "Foreign-exchange instability"), and asserts that "it is quite probable that there will be a return eventually to some form of gold standard, though present conditions make this "extremely difficult, if not impossible" (p. 62).

The burdens placed on our trade and investment interests by the widespread practice of exchange control have required the attention of the Department of State. The development of policy is traced (chapter 3) on a background of the history of exchange control since it became important in 1931. In general the emphasis is on the techniques that have been evolved rather than on economic effects. Chapters 4 and 5 deal respectively with "Inter-governmental debts," and "Foreign dollar bonds in default." Much of the former chapter covers material that is quite familiar, but a useful service is performed in tracing developments resulting from the occupation of conquered lands by Germany. Chapter 5 brings together a good deal of material illustrating the experience of American investors with the several debtor countries. Considerable space is devoted to the formation and effectiveness of bondholders' protective organizations. The existence of several independent organizations of this sort has at times made it difficult for issuers and holders to synchronize their efforts. The last two chapters deal with double taxation among nations, and government facilities for assisting in the financing of foreign trade (mainly the Export-Import Bank.)

The book shows much care in preparation, and is well organized. Its merits are the meticulousness with which official aims are presented, and the success achieved in reducing a large amount of information to a compact and usable form.

KENYON E. POOLE

GRAHAM, F. P., and others. *The poll tax.* (Washington: Am. Council on Public Affairs. 1940. Pp. 23.)

KEYNES, J. M. *How to pay for the war.* (London: Macmillan. 1940. Pp. 78. 1s.)

KILPATRICK, W. *State supervision of local budgeting.* (New York: Nat. Municipal League. 1939. Pp. 131. $1.)

Enlarging public financial competence and advancing social ideals are complementary forces; consequently, our public economy which has been expanded to include much gratuitous service has greatly increased municipal and other local expenditures. Furthermore, since it is productive efficiency which provides the wealth and income to support general well-being, the serious crippling of our economic organization by depression has embarrassed local financing. Scholars and alert administrative officers are ever seeking solutions to persistent old and vexing new governmental problems. Tax delinquency and municipal debt defaults have focused attention upon local budgeting and the desirability of enlisting the aid of the state in a supervisory capacity with the hope that local government might be lifted to a high level of efficiency.

That the reëxamination of state budgetary supervision in the United States reveals the possibility of and necessity for a more complete allocation of this

important function to state supervisory boards is the thesis of this volume. The case examined advocates the extension of state supervision to budget balancing, provision of forms for integrated operation, control of administrative costs, and the relating of financial processes. The tenets of effective supervision set forth include integration of administration, the definition of state responsibility, complete planning, the establishment of standards, and coöperation between state and local officials under democratic control.

The author after extended analysis sets forth a statement of principles, and through persuasive logic concludes that the program of an enlarged state supervision is practicable. The treatment of the subject matter identifies the writer both as a political scientist and as one schooled in the art of government.

The ideas presented are acceptable and the principles enunciated are sound; but the book because of its nature will be best comprehended by the expert. How to render the doctrine popular in the face of local prejudice toward state tutelage is not a simple matter to determine. It is not improbable that the tendency toward centralization of governmental function will meet again with stronger resistance in harmony with American tradition.

Though the sweeping adoption of the advocated thorough-going state supervision of local budgeting cannot be hoped for, the objectives are laudable. Many will respond to the call for assistance in bringing the reform to fruition. Much should be accomplished in a decade or two.

FRANK A. NEFF

LAW, H., compiler. *Insurance tax laws.* (Nutley, N. J.: Compiler. 1939. Pp. 78. $2.)

LUTZ, H. L. *The business man's stake in government finance.* Lectures delivered at the third annual Stanford business conference, July 17-21, 1939. (Stanford University, Calif.: Stanford Univ. 1939. Pp. 119.)

LUTZ, H. L. *The taxation of railroads in New Jersey.* (Princeton: Princeton Univ. Press. 1940. Pp. viii, 208. $2.50.)

Professor Lutz's monograph is of especial interest in New Jersey in view of the current breakdown of railroad tax collections in that state and the ensuing litigation. It is also timely from a national viewpoint because of its bearing on the problem of improving the financial condition of the railroads and on the problems of property tax administration and special business taxation.

Chapter 1 reviews the development of the railroad tax law and chapter 2 covers the growth of railroad assessments and taxes and the effects of the withholding of a portion of these taxes during the current litigation. Chapter 3 criticizes the *ad valorem* theory of railroad taxation and chapter 4 criticizes the procedure of railroad assessment in New Jersey. Chapter 5 considers proposals for reform and chapter 6 discusses the amount of revenue from railroad taxation which might be expected in the immediate future.

Professor Lutz holds that if the *ad valorem* system of railroad taxation is retained, steps should be taken to eliminate so far as possible the present over-assessment of railroad property, assessments should give weight to fluctuations in earnings as well as to the reproduction cost of the properties, and the roads should be appraised on a unit basis with a proportion allocated to the state on the basis of track mileage. He favors a gross receipts tax in place of the *ad valorem* system, but makes no positive recommendation for its adoption in New Jersey. Professor Lutz believes that railroad taxes might be made to yield from $8,000,000 to $12,000,000 annually, with the latter figure as "an extreme

upper limit," in contrast to an average annual assessment of $17,683,000 and an average annual collection of $7,790,000 during the period 1932-37. Even the smaller figure mentioned by the author would be a heavy burden on the roads at present and would also be heavy by comparison with the levies of other states.

The reviewer has a few minor criticisms to offer. First, the relation between reproduction cost and capitalized income as measures of property valuation could have been more clearly and fully developed. Second, the difficulties with gross receipts taxation should have been discussed, especially the problem of securing an equivalence of tax burden with businesses subject to property taxation. Finally, some attention might have been given to the suggestion of a committee of the National Tax Association that public utilities be taxed on net earnings, but if the net earnings tax should be less than a gross receipts tax at a lower rate, the latter would be paid.

ROBERT W. HARBESON

MANN, F. K. *Das Endziel der Finanzpolitik.* Sonderdruck aus Etudes Dédiées à la Mémoire d'Andréadès. (Athens: Druckerei "Pyrsos." 1939. Pp. 14.)

PFIFFNER, J. M. *Municipal administration.* (New York: Ronald. 1940. Pp. xvi, 582. $4.)

Contains chapters on finance, social service administration, housing, and public utilities.

ROHR, C. J., editor. *The problem of taxation in Massachusetts.* (Amherst: Massachusetts State Coll. 1939. Pp. 74. Gratis.)

SWIFT, F. H. *European policies of financing public educational institutions. 5. England and Wales.* Univ. of California pubs. in educ., vol. 8, no. 5. (Berkeley: Univ. of California Press. 1939. Pp. 295. $2.50.)

WALDON, S. D. *Federal automotive excise taxes should be repealed.* Statement submitted to U. S. Treasury Dept. (Washington: Am. Automobile Assoc. 1939. Pp. 13.)

Annual report of the Secretary of the Treasury on the state of the finances for the fiscal year ended June 30, 1939. (Washington: Supt. Docs. 1940. Pp. xvi, 560. 60c.)

Commissioners of His Majesty's Customs and Excise: thirtieth report for the year ended 31st March, 1939. Being the 83rd report relating to the customs and the 82nd report relating to the excise. (London: H. M. Stationery Office. New York: British Lib. of Information. 1939. Pp. 205. 90c.)

Exemption and preferential taxation of factories. Bull. no. 24. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 13. 50c.)

Exemption and preferential taxation of homesteads. Bull. no. 20. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 15. 50c.)

Government the citizens' business. Proc. of citizens' conf. on govt. management, Estes Park, Colorado, June 19-23, 1939. (Denver: Univ. of Denver School of Commerce, Accounts and Finance. 1939. Pp. xviii, 624.)

Includes brief papers on government income and outgo, financial management and control, and social security.

L'imposta sul patrimonio in Italia ed all' Estero. Quaderni viii. (Rome: Assoc. fra le Soc. Italiane per Azioni. 1939. Pp. 155. L. 12.)

Motor fuel tax law of New York with regulations and general instructions, January 10, 1940. (Albany: New York State Dept. of Taxation and Finance. 1940. Pp. 29.)

Proceedings of the sixth national conference on assessment administration, held at San Francisco, California, October 10 to 13, 1939. (Chicago: Nat. Assoc. of Assessing Officers. Pp. iv, 60.)

Property taxation of intangibles. Bull. no. 21. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 13. 50c.)

1939 Revenue act, with complete explanation. (New York: Prentice-Hall. 1939. Pp. 99. $1.)

A standard classification of municipal revenues and expenditures. (Chicago: Nat. Committee on Municipal Accounting. 1939. Pp. 103. $1.)

State tax administration. Mich. pamph. no. 6. (Ann Arbor: Univ. of Michigan Bur. of Govt. 1940. Pp. 18.)

Urban land appraisal: a description of methods employed in assessing property taxes. Assessment practice ser. no. 2. (Chicago: Nat. Assoc. of Assessing Officers. 1940. Pp. v, 170. $3.)

Population and Migration

The Natural History of Population. By RAYMOND PEARL. (New York: Oxford Univ. Press. 1939. Pp. xii, 416. $3.50.)

In this volume Dr. Pearl continues his reports on the results of the studies that he has been carrying on for many years concerning human fertility in relation to the problems of population. Following introductory material on the biology of fertility and the pattern of reproductivity, main consideration is devoted to the results of an attempt to appraise quantitatively the effect of contraceptive efforts on fertility and the movement of population. The data utilized for this purpose consist of original records, made by obstetricians in first-class urban hospitals, concerning the entire reproductive history of each woman delivered of a baby in the hospital, an account of her use of contraceptives, and information concerning her social, educational, economic, health, and religious status. The material involves 30,949 women resident in or near 26 large cities in 15 states east of the Mississippi River and north of the southernmost tier of states. This unique material is more adequate, comprehensive, and valid, from the scientific viewpoint, than that obtained from the records of birth-control clinics, the only source of information about contraceptive practices hitherto available.

Pearl finds that the extent of contraceptive effort is greater among whites than among negroes, and varies directly with amount of income and degree of education, while as between religious groups the ranking order is Jews, Protestants, Catholics. The effectiveness of contraceptive efforts increases with advancing economic position, but shows no regular or marked statistical association with educational status. The practice of criminal abortion is found to be three times as frequent among those who practise contraception as among the non-contraceptors, indicating an effort to remedy the failures of contraceptive techniques. The broad result that emerges from the study is that "if it were not for the effect of contraceptive efforts and

the practice of criminal abortion, together with correlated habits as to postponement of marriage, there would apparently be little or no significant differential fertility as between economic, educational, or religious classes of urban American married couples."

The decline in fertility is not confined to highly civilized countries, but seems to be a world-embracing phenomenon, positively correlated with the degree of industrialization, urbanization, and consequent population density. From his data on world population Pearl concludes that the mean annual growth-rate per cent for the world population is steadily decreasing at the present time and has been during the recent past.

Whereas the volume does not present startlingly new results, it adds appreciably to the accuracy and refinement of present knowledge concerning fertility and the factors influencing it.

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NEW BOOKS

CHEN, T. *Emigrant communities in South China: a study of overseas migration and its influence on standards of living and social change.* English version edited by BRUNO LASKER. (New York: Inst. of Pacific Relations. 1940. Pp. xvi, 287. $2.50.)

FAIRCHILD, H. P. *People: the quantity and quality of population.* (New York: Holt. 1939. Pp. 315. $2.25.)

This small volume is an admirably written, non-technical presentation of the topics usually covered in population analysis. Rather than attempt a synthesis of the factual data now available, Fairchild has chosen to present a clear exposition of basic principles underlying Malthusianism, population increase, optimum population, migration, the balance of births and deaths, eugenics, etc. Fairchild here classifies himself both among the moderate depopulationists and the moderate critics of eugenics.

RUPERT B. VANCE

MYRDAL, G. *Population: a problem for democracy.* Godkin lectures. (Cambridge: Harvard Univ. 1940. Pp. 252. $2.)

WRIGHT, F. C. *Population and peace: a survey of international opinion on claims for relief from population pressure.* (New York: Columbia Univ. Press. Paris: Internat. Inst. of Intellectual Co-op. 1939. Pp. xvi, 373. $2.)

This volume, one of a series on "peaceful change" issued by the International Studies Conference and intended primarily for the ordinary reader, presents a conspectus of opinion on problems arising out of disproportions between the international distribution of population and that of resources, and on means whereby these problems may be solved peacefully. Part 1 is devoted to the population situations and claims of the so-called "dissatisfied" countries (chiefly Italy, Japan, Poland, and Germany); part 2, to notions of overpopulation and to present population trends and their various effects; part 3, to solutions for the problems indicated. An appendix on the organization of migration, a source bibliography, an index, and a study of the population capacity of Australia are appended. The practical usefulness of this oftentimes interesting study is somewhat reduced by a not too critical use of sources, and by the fact that

all references are placed at the end of the volume. Needless to say, events since September 1, 1939, have rendered some of the discussion archaic; but certain of the main conclusions remain valid.

The presentation of views concerning the meaning and significance of such concepts as "overpopulation," "underpopulation," "optimum population," "depopulation," etc., is of interest, not because precision is given these terms, but because it reveals to what a remarkable degree the minds of continental writers on population are cluttered with mysticism and verbal rubbish ". . . a cluttering that has increased in consequence of the post-war intensification of economic and sociological irrationalism." It is evident that until a real effort is made to agree on principles and on the relative weights to be attached to given principles". . . an effort that is impossible as long as religious belief masquerades as scientific principle . . ." discussions of the sort summarized by Dr. Wright cannot but be fruitless.

Some definite information relative to the solubility of the "overpopulation" of the so-called have-not nations is provided. Neither emigration nor the redistribution of the colonial holdings of the principal colonial empires offers much in the way of remedy. The development of as yet unexploited domestic food sources will be of quite limited benefit. Industrialization, coupled with freedom of access to both raw materials and consumer markets, remains, one infers from part 3, the principal solution. At no time is the question posed and considered: must not a solution for the problem of population pressure in many countries be sought, in part at least, in a deliberate reduction of their respective numbers? On the contrary, the names of several distinguished scholars are used to bolster economic fallacies that should be evident to sophomores.

J. J. SPENGLER

Report of the Royal Commission on the distribution of the industrial population. (London: H. M. Stationery Office. Pp. x, 320. 5s. 4d.)

Vital statistics of the United States, 1937. Part 1. *Natality and mortality data for the United States tabulated by place of occurrence with supplemental tables for Hawaii, Puerto Rico, and the Virgin Islands.* Part 2. *Natality and mortality data for the United States tabulated by place of residence.* (Washington: Bur. of the Census. 1939. Pp. 616; 186. $2; $1.25.)

Social Problems and Reforms

Consumer Expenditures in the United States: Estimates for 1935-36. (Washington: Nat. Resources Committee or Supt. Docs. 1939. Pp. ix, 195. 50c.)

This report is based on the Works Progress Administration project, *Study of Consumer Purchases,* conducted in 1935-1936. Schedules were secured from 60,000 non-relief families in cities of different sizes, in villages and on farms, in 30 different states. Schedules from single individuals were collected only in Chicago and Portland, Oregon; this information was supplemented by data from other sources. The introduction states: "The study provides for the first time in American history an extensive and comparable body of data on the spending habits of the various major groups of American consumers."

The chief emphasis in this report is on differences in consumer outlays according to income. The most important tables, 1 and 2, show the outlays of American families in fifteen income levels for sixteen categories of current consumption, gifts and personal taxes and savings. Tables 3 and 4 show corresponding data for single individuals in the same fifteen income levels. Outlays of consumer units by race, occupation, size of community and section of country do not appear in this report but some of these analyses have been and are being made for publication in other reports.

When the study was proposed, one of its chief objectives was stated to be the information it would give us on the spending of the upper income groups. Such knowledge was needed by students of standards of living and by business-men alike. In the minds of many people this was to be the chief, as it was to be the most unique, value of the study. It is particularly disappointing, therefore, to read on page 136 that the figures for the level of $20,000 and over were secured from only 14 families, 11 in the $20,000-$25,000 income range and three with incomes over $25,000. If the house-to-house canvass of families failed to yield returns from the higher income groups, there were other ways of securing schedules to give a more adequate sample of outlay practices at these levels. As it is, the need for a study of expenditures in the income groups over $20,000 remains practically as great as ever.

The most noteworthy finding of the study is the extent of annual deficits among American families for 1935-1936. Family incomes, on the average, were not sufficient to meet current outlays for the income groups below $1,250; this includes 55 per cent of American families. Incomes below $1,000 were, on the average, insufficient for single individuals; the group includes 61 per cent of all. The report of average deficits for majority groups of families and single persons will lead many readers to ask if there is any general tendency for people to understate rather than to over-state their savings, or if they would have a particular tendency to do so to interviewers who were themselves on a W.P.A. project. In the studies of expenditures of farm families made at Iowa State College, we have found the savings item particularly difficult to get at and likely to be understated. But the schedule used in the consumer purchases study was carefully drawn up, so that so far as inaccuracies could be attributed to the schedule itself they would appear to have been minimized.

There is also the possibility that the years 1935-1936 were not typical years for deficits. The study took account of instalment buying, subtracting from debts amounts paid on commitments made before the current year and adding amounts remaining unpaid on commitments of the current year. If, therefore, because of depletion of household goods during the depression, or for other reasons, the years 1935-1936 were years in which unusually

large instalment commitments were made by the lower income groups, the average deficits would not have so great a significance as if instalment buying were uniform from year to year. The Retail Credit Survey of the Bureau of Foreign and Domestic Commerce does indicate some expansion of instalment buying for 1935-1936 for the country as a whole.

The report states that further analysis of the data will throw some light on the problem of deficits. How are the average deficits distributed among families and individuals, to what extent are deficits met out of past savings, to what extent do they represent unpaid bills? What are their main causes? Certainly such analysis is needed, and more intensive study of the matter of savings and deficits in general, and for other years.

In presenting a percentage picture of total American consumption the report states."Unfortunately no other study has as yet been made for 1935-1936," although the reviewer's estimate for 1936, very similar to the findings of this study, was available.[1] But the most serious omission in the discussion and presentation of the data of this report is information as to average size of families at the different income levels. The report states that it is to be followed by another on adequacy of income, in which size of families must, of course, appear. But some assumptions as to adequacy are evident throughout this report (*e.g.*, pp. 11, 42, 66) and other assumptions also are made which the data presented do not themselves justify. For example on page 8 we read: "These figures suggest there is no discernible limit to the potential expansion of consumer demands," although an estimate of 51 per cent for savings is made for the income group $20,000 and over.

The text of the present report reflects little of the challenge to thinking that would appear to be implicit in the data presented. A collection of data so large and so important as this can hardly be expected more than once in a generation. Their analysis offers a unique opportunity for revising old concepts by pointing out changes in our values: for example, to what extent do these figures show an increase of the conventional relative to the physiological in "necessary" standards of living? Also the data are a stimulus to questions which should lead to new understanding of the consumption process: for example, do we know the most important reasons for difference in the patterns of family as contrasted with individual expenditures? What are the chief causal factors and what is the significance of income elasticity of demand? Response to this challenge we shall look for in other reports.

ELIZABETH E. HOYT

Iowa State College

[1] E. E. Hoyt, *Consumption in Our Society* (New York, McGraw-Hill, 1938) p. 254.

NEW BOOKS

ATWATER, P. *Problems of administration in social work.* (Minneapolis: Univ. of Minnesota Press. 1940. Pp. 331. $3.50.)

COIT, E. G. *Government support of workers' education, with special reference to a study of the relation of private and public agencies in the field of workers' education in Denmark and Sweden.* (New York: Am. Labor Educ. Serv. 1940. Pp. 72.)

DAVIS, S. C. *America faces the forties.* (Philadelphia: Dorrance. 1940. Pp. 283. $2.75.)

DE VINNEY, L. C., ISE, J. and JACOBY, N. H. *Economic issues and 1940.* Univ. of Chicago Round Table broadcast, no. 103. (Chicago: Univ. of Chicago. 1940. Pp. 29. 10c.)

ENZLER, C. J. *Some social aspects of the depression (1930-1935).* (Washington: Catholic Univ. of America Press. 1939. Pp. 187. $2.)

HAGOOD, M. J. *Mothers of the South: portraiture of the white tenant farm woman.* (Chapel Hill: Univ. of North Carolina Press. 1939. Pp. vii, 252. $2.)

This monograph is primarily a qualitative analysis of population based on detailed records of 117 mothers in the North Carolina Piedmont. A comparison made with an equal number of mothers in the "Deep South" shows that the findings apply with but slight deviations throughout the rural Southeast.

The middle section of the book draws vivid individual portraits of farm women, showing them at their three-fold task of farm labor, housekeeping, and bearing and raising children. These pictures are seen against the background pattern of large, patriarchial families living on farms where an "all-work" program narrowly circumscribes interests, but achieves small measure of economic security. More than half the women were between the ages of thirty-five and forty, though they ranged from one of seventy-odd years to an unmarried mother of seventeen. The "typical" mother, married at eighteen, has six or seven children, lives in a four-room, unpainted house, without running water or electricity, and cooks on a wood stove with antiquated equipment. She takes an active interest in the management of the farm but knows little of its financial affairs. In summer the mother is usually barefoot and wears a faded cotton dress; in winter she adds shoes and an old sweater. Though her health is only mediocre, she is emotionally mature and adjusted, devoted to the children she has but fearful of having more.

The portraits of individuals striving for security and "respectability" against great odds ring so true that the book should appeal to the general reader who has normal human curiosity about the lives of his neighbors. For such a reader, a bibliography and an initial definition of the range which "tenancy" included would have been helpful.

For the academic reader and the specialist, the last section of the book gives a valuable account of the technique of the study. The combination of statistical, case, and survey methods is admirably adapted to the material. The book answers many questions about the quality of a group which produces more than its share of the nation's population. It raises others which should stimulate further research.

GLADYS BOONE

HOYT, H. *The structure and growth of residential neighborhoods in American cities.* (Washington: Supt. Docs. 1939. Pp. vi, 178. $1.50.)

Two particular contributions to the literature of urbanism and, more especially, to that of urban residential neighborhoods, may be attributed to this volume. These two contributions are respectively that of fixing and standardizing the technique in this field of investigation and the brief but suggestive chapter 3 of the appendix, entitled "Research in urban growth—an aid in selecting mortgage risks." The latter leads easily to the assumption that, given the basis of standardized technique of data assembly, the resulting body of material will lend itself to more varied and more scientific interpretation than would be the case had the foundation been less stable.

The many figures and illustrations, in reality city maps, show various patterns of city growth, such as age of structures, new dwelling construction, rents in residential areas, etc., and add to the permanent technical value as well as to the fertile possibilities of this volume.

Dr. Hoyt is principal housing economist of the Division of Economics and Statistics of the Federal Housing Administration under whose auspices the volume is published.

A. R. HASSE

JAMES, A. W. *Virginia's social awakening.* (Richmond: Garrett and Massie. 1939. Pp. 209. $3.)

JONES, R. J. *A comparative study of religious cult behavior among negroes, with special reference to emotional group conditioning factors.* Stud. in the soc. sci., vol. ii, no. 2. (Washington: Howard Univ. 1939. Pp. v, 125.)

LESCURE, J. *Etude sociale comparée des régimes de liberté et des régimes autoritaires (essai d'économie sociale comparée).* (Paris: Domat-Montchrestien. 1939. Pp. 479. 80 fr.)

MICHENER, J. A., editor. *The future of the social studies: proposals for an experimental social-studies curriculum.* (Cambridge: Nat. Council for the Soc. Stud. 1939. Pp. 178. $1.50.)

MUSE, M. and OPENSHAW, M. E. *Incomes and expenditures of 299 Vermont village families.* Bull. 450. (Burlington: Univ. of Vermont and Vermont Agric. Exp. Station. 1939. Pp. 46.)

ROREM, C. R. *Non-profit hospital service plans: historical and critical analysis of group hospitalization, a non-profit, non-political application of the principle of insurance to the purchase of hospital care.* (Chicago: Commission on Hospital Serv., Am. Hospital Assoc. 1940. Pp. 130.)

RYAN, P. E. *Migration and social welfare: an approach to the problem of the non-settled person in the community.* (New York: Russell Sage Found. 1940. Pp. 120. 50c.)

SCHNEIDER, D. M. and DEUTSCH, A. *The road upward: three hundred years of public welfare in New York State.* Social welfare today in N. Y. no. 1. (Albany: N. Y. State Dept. of Social Welfare. Pp. 59.)

TEAD, O. *New adventures in democracy: practical applications of the democratic idea.* (New York: McGraw-Hill. 1939. Pp. xi, 229. $2.)

I am personally enthusiastic about this book. I approached it at first with distrust on account of its academic wordiness, but then I found (pp. 99 *ff.*) that it was describing in general terms applicable to all administrative bodies exactly the special experience which I and my colleagues on the new Industrial Commission of Wisconsin had gone through nearly thirty years ago

in taking an old-fashioned political and civil service factory inspection department and converting it into a marvelous "safety first" practical administration for the welfare of the working people of the state. Ordway Tead is writing what he calls a "science of administration," but I can see the actual people that he is talking about and they were doing the thing in as nearly the way he describes in generalized terms as though he had been there. I may be excused for giving to this book this kind of a review. I have read it through and carefully.

The subjects covered, not so much in detail as in their relations to each other, are the selection of personnel, or civil service and leadership; organization for planning contrasted with execution; collective bargaining; self-government and representation of interests in the formation and execution of administrative regulations; the dependence on public opinion and propaganda; the enhancement and safeguarding of individual personality in the midst of the increasing organization for administrative control; and his "new adventures," on the whole, are "administrative democracy" contrasted with the "legislative democracy" of preceding centuries of constitution-making and statute-making.

JOHN R. COMMONS

TIFFANY, M. E. *Clothing consumption of 299 village and 551 farm families in Vermont.* Bull. 451. (Burlington: Univ. of Vermont and Vermont Agric. Exp. Station. 1939. Pp. 48.)

WALLIS, W. D., and others. *Our social world: an introduction to social life and social problems.* Rev. ed. (New York: McGraw-Hill. 1940. Pp. 415. $1.68.)

WILLIAMS, C. B. and STEVENSON, A. H. *A research manual, with a bibliographical guide to college studies and interests.* (New York: Harper. 1940. Pp. xiv, 264. $1.25.)

WOOD, E. E. *Introduction to housing facts and principles.* (Washington: Supt. Docs. 1940. Pp. xi, 161. 30c.)

Education and economic well-being in American democracy. (Washington: Educ. Policies Commission. 1940. Pp. 227. 50c.)

Introduction to housing: facts and principles. (Washington: U. S. Housing Authority. 1940. Pp. 161. 30c.)

Urban and rural housing. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. xxxvi, 159. 80c.)

An "international study of the methods employed in various countries for improving housing conditions, with special reference to the cost involved and the results obtained" was decided upon by the Assembly of the League of Nations in 1937. The inquiry was entrusted to Mr. Bengt Helger, of the Swedish Social Board, who has had special opportunities to familiarize himself with the problems of housing finance. The study includes observations on the urban and rural housing situation in Belgium, the Netherlands, the United Kingdom, Denmark, Finland, France, Norway, Sweden, the United States and Canada. The 36-page introduction is a topical summary of the outstanding findings in these countries in regard to the organization of real estate credit, post-war trend in housing policy and of subsidies, blighted areas, slum clearance, rural housing and housing cost.

A. R. HASSE

What does the housing program cost? (Washington: U. S. Housing Authority. 1940. Pp. 31.)

Insurance and Pensions

Financing Economic Security in the United States. By WILLIAM WITHERS. (New York: Columbia Univ. Press. 1939. Pp. x, 210. $2.75.)

The questions raised by Professor Withers are important. Can we afford such large expenditures for relief and social insurance? How much can we afford? From what sources should the funds be derived? How should they be distributed among the needy? What type of financial administration should be established for these funds? The answers he gives are significant rather for their disclosure of what is involved in the use of certain major premises as a basis for the answers than for the substantial defense of those premises.

Not only can we afford present expenditures, but we could afford 1½ to 2 billions more a year if we should simply revise our tax systems in line with the recommendations of the Model Tax Plan of a Committee of the National Tax Association. The author accepts Professor Newcomer's estimates of what would have been available under such a system of taxation.

The source of funds should be found in progressive rather than in regressive taxes. In defense of this conclusion, the author takes his stand with those economists who see the need for government spending and investment to take up the slack in purchasing power and private investment characteristic of a depression in normal economic activity. The sentiment in favor of lower taxation for the sake of business improvement he thinks is not justified. The problem is not so much in the amount of taxes as in the form they take. Decreasing emphasis on regressive taxes, including payroll taxes, which take away with one hand what is given in the form of benefits by the other, is desirable. Increasing emphasis on progressive taxation which effects a sounder use of income will actually stimulate opportunities for profitable enterprise. These reasons are stated rather than defended.

The author favors the reassertion of what he calls the "need" (as opposed to the "ability") principle in the distribution of funds to the needy. This can be accomplished through allocating a large share of the funds to direct relief, modification of the qualifications for social insurance so that less reliance is placed on ratio of benefits to previous wages, determination of work relief wages by reference to need, national rather than local administration and the use of grants in aid to equalize the relief burden between the states. Why emphasize the need principle? Because this is the liberal position, and by implication because this approach is most likely to correct the maladjustments in capitalist economic processes which call for remedy. One might agree with many of these suggestions for distribution of funds and still wish that Professor Withers had undertaken a more substantial defense of his basic position that the "need" principle is the appropriate guide for that distribution.

In order to distribute funds according to this principle it will be necessary to devise a formula for federal allocation of funds which will take into account the several factors influencing the relative need of the states for funds and their relative ability to raise funds from local sources. If the confusion of F.E.R.A. days is to be avoided and funds distributed in accordance with a plan designed to accomplish the purposes assumed to be desirable, such a formula is imperative. The author names many of the factors that can be taken into account, but his suggestion for a formula begs the whole question of which factors are to be selected and what weighting is to be given to the several factors. Labelling *the relief load* as "light, medium and heavy," and labelling *economic capacity, fiscal situation, political, administrative and civic situation,* as "good, fair, and bad," provides little clue as to the way objective evidence warranting such classification is to be gathered and its significance measured. This is the heart of the problem.

Professor Withers introduces his discussion of these problems by a concise and orderly summary of the development of economic security measures since 1929. His analysis in terms of their emphasis on the "need" as opposed to the "ability" principle is a welcome departure from the unanalyzed fact presentation of most summaries of this development. He is inclined to describe the process as a dramatic struggle between these two principles, but he is not unaware of the practical reasons which stimulated the changes which took place. Whether or not the resulting arrangements are the product of a struggle between two principles, his definition of what is involved in arrangements consistent with each of them furnishes a convenient summary of issues around which the development has taken place. Small public expenditures or large; local or national responsibility; benefits in proportion to earnings or in accordance with need; payments to workers-on-relief in accordance with service rendered or without regard to the value of services; these are issues which will continue to be debated for some time to come. The contribution of Professor Withers' book is to state these issues and show what is involved in one approach to their settlement rather than to furnish the complete answer to the many questions of policy and conflicting interests involved in the problems of financing economic security in the United States.

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NEW BOOKS

Cohen, W. J. *Unemployment insurance and agricultural labor in Great Britain.* Pamph. ser. no. 2. (Washington: Committee on Social Security, Soc. Sci. Res. Council. 1940. Pp. viii, 32. 50c.)

Féraud, L. *Actuarial technique and financial organisation of social insurance: compulsory pension insurance.* Stud. and rep., ser. M, no. 17. (Geneva and Washington: Internat. Labour Office. 1940. Pp. vi, 568. $4.)

GILBERT, E. A. and GILBERT, M. *Life insurance: a legalized racket.* (New York: Farrar and Rinehart. 1940. Pp. 224. $1.)

HOBBS, C. W. *Workmen's compensation insurance, including employers' liability insurance.* 2nd ed. (New York: McGraw-Hill. 1939. Pp. xviii, 707. $5.)

The title page of this book carries the information that it is a second edition, and it is based in large part upon the book by Michelbacher and Nial, bearing the same title and published in 1925. But the present work is, in fact, practically a complete rewrite, with much amplification (from 503 to 707 pages) and major changes in arrangement and presentation.

It is significant that this is the first general work on the subject of compensation for industrial accidents in well over a decade. And, as we round out thirty years of experience in this country with this type of social insurance, modernization of the texts and manuals is in order. Recent new social legislation and liberalization of older laws makes this need more urgent. Mr. Hobbs has responded to this demand by expanding the discussion of subjects upon which have centered many of the recent problems and changes; included employments, injuries covered, and benefits granted.

Other important improvements are the enlargement and more logical arrangement of the chapters on insurance carriers and rate making; weeding out of the appendices material that was of doubtful value and substituting significant and useful tables and charts, such as a comparison of benefits under the various state and federal laws; and the compilation of a separate index of cases. A "Table of Selected References," containing but nine items, is far from adequate, and a more complete bibliography would have been a worthwhile addition.

HOWARD M. TEAF, JR.

HUBER, F. *Seasonal workers and unemployment insurance in Great Britain, Germany, and Austria: a survey of legal provisions and administrative practice through 1938.* Social Security Board Bur. rep. no. 4. (Washington: Supt. Docs. 1940. Pp. viii, 167. 20c.)

MITCHELL, J. B. *The collapse of the National Benefit Life Insurance Company: a study in high finance among negroes.* Stud. in the soc. sci., vol. ii, no. 1. (Washington: Howard Univ. 1939. Pp. 150.)

MURPHY, R. D. *Sale of annuities by governments.* Address at 33rd annual convention of Assoc. of Life Insur. Presidents, New York, Dec. 15, 1939. (New York: Assoc. of Life Insur. Presidents. 1939. Pp. 18.)

Health insurance. (New York: City Club of N.Y. 1939. Pp. 34.)

Proceedings of the thirty-third annual convention of the Association of Life Insurance Presidents, New York, December 14 and 15, 1939. (New York: Assoc. of Life Insur. Presidents. Pp. 282.)

Savings bank life insurance. (New York: Am. Inst. of Banking. 1939. Pp. 256. $1.50.)

Statistics and Its Methods

NEW BOOKS

BRATT, E. C. *Business cycles and forecasting.* Rev. ed. (Chicago: Business Pubs. 1940. Pp. xvi, 814. $4.)

CAMPION, H. *Public and private property in Great Britain.* (London and New York: Oxford Univ. Press. 1939. Pp. xvii, 130.)

This short monograph is primarily a statistical study "to show the changes

which have occurred in the distribution of private property since the war, and to indicate the extent to which the unequal distribution of property is a factor producing inequality in the personal distribution of wealth in Great Britain" (p. 1). The author has been careful to define his terms, to safeguard against double counting, and to set forth the methods employed in making the study.

The difficulties besetting the investigation are brought into bold relief. Should the Central Electricity Board or the Port of London Authority be considered public or private property? How is the value of public property such as roads, charities, and armaments, to be estimated? The study is made on the basis of the *value* of property and, to the reviewer, this emphasizes the difficulty of measurement in economics so ably stressed by Professor Cannon (*Review of Economic Theory,* p. 52). The author, however, has demonstrated that the bulk of property in Great Britain is privately owned, that public property has been growing since 1911 and now comprises probably about one-sixth of the total national property. The increase has come largely in social security funds and the erection of houses by local authorities. The growth of corporate enterprise has led to an increasing separation of ownership and use of capital.

The conclusion is reached that the increase in public property has lessened the real inequality in the distribution of property and incomes among individuals; also that property is more equally distributed in private hands than 25 years ago, but that inequality in the distribution of property is probably the most important factor in producing inequality of income in Great Britain. This raises the fundamental problem of the extent to which property ownership produces unequal incomes and the extent to which inequality in ownership is the result of inequality of incomes. The author leaves the impression that he favors a more equal distribution of income but he does not make a case for that contention.

D. F. PEGRUM

PREINREICH, G. A. D. *The present status of renewal theory.* (Baltimore: Waverly Press. 1940. Pp. 27.)

SPURR, W. A. *Seasonal variations in the economic activities of Japan.* Univ. stud. vol. xl. (Lincoln: Univ. of Nebraska. 1940. Pp. ix, 129.)

TINTNER, G. *The variate difference method.* (Chicago: Cowles Comm. for Res. in Econ., Univ. of Chicago. 1940. Pp. xiii, 175. $2.50.)

Index of data tabulated from the 1930 census of population, including unemployment. (Washington: Supt. Docs. 1940. Pp. 47.)

Statistical measurement in group work, manual on statistical records for use by staff members. Labor Dept., Children's Bur. pub. 248. (Washington: Supt. Docs. 1939. Pp. 103. 15c.)

PERIODICALS

General Works, Theory and Its History

ALEXANDER, S. *Mr. Keynes and Mr. Marx.* Rev. Econ. Stud., Feb., 1940. Pp. 13.
ANDERSON, T. J., JR. *Note on "The rise of monopoly."* Am. Econ. Rev., Mar., 1940. Pp. 3.
BROWN, W. M. *Some effects of a minimum wage upon the economy as a whole.* Am. Econ. Rev., Mar., 1940. Pp. 10.
BYE, R. T. *Problems in the teaching of economics.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 6.
CAPLAN, B. *The premature abandonment of machinery.* Rev. Econ. Stud., Feb., 1940. Pp. 10.
COBBENHAGEN, M. J. H. *Over enige nieuwe economische litteratuur.* II. Maandschr. Econ., Jan., 1940. Pp. 9.
——————. *Synthese in de economie.* Maandschr. Econ., Feb., 1940. Pp. 15.
COLM, G. *Comments on W. I. King: "Are we suffering from economic maturity?"* Jour. Pol. Econ., Feb., 1940. Pp. 5.
DEMARIA, G. *Sull'attendibilità di una tesi del Keynes a proposito di variazioni dei salari monetari e reali.* Giorn. d. Econ., Sept.-Oct., 1939. Pp. 11.
DORFMAN, J. *The economic philosophy of Thomas Jefferson.* Pol. Sci. Quart., Mar., 1940. Pp. 24.
GRAHAM, F. D. *Theory of international trade.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 4.
GRAY, L. C. and REGAN, M. *Needed points of development and reorientation in land economic theory* (with discussions by M. M. Kelso). Jour. Farm Econ., Feb., 1940. Pp. 18.
HAWTREY, R. G. *The trade cycle and capital intensity* (with a reply by Nicholas Kaldor). Economica, Feb., 1940. Pp. 22.
VON HAYEK, F. A. *La libertad y el sistema economico.* El Trimestre Econ., Jan.-Mar., 1940. Pp. 35.
HICKS, E. *Alexander Del Mar, critic of metalism.* So. Econ. Jour., Jan., 1940. Pp. 19.
HOOVER, C. B. *Economic planning and the problem of full employment.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 9.
HORNER, F. B. *The multiplier in Australia: a further comment.* Econ. Record, Dec., 1939. Pp. 12.
HUTT, W. H. *Privacy and private enterprise.* So. African Jour. Econ., Dec., 1939. Pp. 14.
ISE, J. *Monopoly elements in rent.* Am. Econ. Rev., Mar., 1940. Pp. 13.
JECKLIN, H. *Zur Tarifanalyse.* Blätter f. Versicherungs-Math., Feb., 1940. Pp. 5.
KALECKI, M. *The supply curve of an industry under imperfect competition.* Rev. Econ. Stud., Feb., 1940. Pp. 21.
KNIGHT, F. H. *"What is truth" in economics?* Jour. Pol. Econ., Feb., 1940. Pp. 32.
KOCK, K. *Några problem rörande definitioner och terminologi i teorien för de internationella kapitalrörelserna.* Ekon. Tids., Dec., 1939. Pp. 14.
LENTI, L. *Sui rapporti di concentrazione spaziale.* Giorn. d. Econ., Nov.-Dec., 1939. Pp. 16.
LERNER, A. P. *Professor Hicks' dynamics.* Quart. Jour. Econ., Feb., 1940. Pp. 9.
LEROSSIGNOL, J. E. *Mill on machinery.* Am. Econ. Rev., Mar., 1940. Pp. 2.
LUGLI, L. *La funzione dinamica del credito in Schumpeter e Hahn.* Giorn. d. Econ., Nov.-Dec., 1939. Pp. 12.
MACHLUP, F. *Professor Hicks' statics.* Quart. Jour. Econ., Feb., 1940. Pp. 21.
——————. *The theory of foreign exchanges.* II. Economica, Feb., 1940. Pp. 28.
MANOÏLESCO, M. *Pour un vocabulaire international de la science économique. Essai de définition de ses trois notions axiales: utilité, valeur, richesse.* Rev. d'Econ. Pol., Sept.-Dec., 1939. Pp. 18.
——————. *Die theoretische Problematik des Aussenhandels—Synthese—Beweisführung—Polemik.* Weltwirtsch. Archiv, Jan., 1940. Pp. 82.
MAVERICK, L. A. *Demand and supply curves.* Quart. Jour. Econ., Feb., 1940. Pp. 7.
MAX, H. *Las bases teóricas de la política monetaria.* Rev. de Fomento, Nov., 1939. Pp. 114.
MAYER, J. *Broader value concepts in economics.* Jour. Soc. Philos., Apr., 1940. Pp. 20.

McQueen, R. *The approach to economics.* Canadian Jour. Econ. and Pol. Sci., Feb., 1940. Pp. 7.
Miller, J. D., Jr. *Wages-fund theory and the popular influence of economists.* Am. Econ. Rev., Mar., 1940. Pp. 5.
Mirković, N. *Corporative economic theory.* Ekonomist, Sept.-Oct., 1940. Pp. 7.
Neal, A. C. *The "planning approach" in public economy.* Quart. Jour. Econ., Feb., 1940. Pp. 9.
Neisser, H. *The economics of the short run.* (Remarks on John R. Hicks's "Value and Capital.") Soc. Research, Feb., 1940. Pp. 13.
Nelson, R. W. *How dead is the benefit theory?* Am. Econ. Rev., Mar., 1940. Pp. 3.
Neuman, A M. *La funzione attiva dei risparmi e la teoria dell'espansione economica.* Giorn. d. Econ., Nov.-Dec., 1939. Pp. 16.
Niebyl, K. H. *The need for a concept of value in economic theory.* Quart. Jour. Econ., Feb., 1940. Pp. 16.
Papi, G. U. *Condizioni di equilibrio tra struttura economica e attività finanziaria.* Giorn. d. Econ., Nov.-Dec., 1939. Pp. 19.
Pietranera, G. *Considerazioni sulla natura dell'atto economico.* Giorn. d. Econ., Sept.-Oct., 1939. Pp. 16.
Polak, J. J. *Rantsoenering van consumptiegoederen. Enige theoretisch economische opmerkingen.* De Econ., Feb., 1940. Pp. 20.
Puffer, C. E. *Indifference curves versus marginal utility.* Am. Econ. Rev., Mar., 1940. P. 1.
Reilly, E. E. *The use of the elasticity concept in economic theory with special reference to some economic effects of a commodity tax.* Canadian Jour. Econ. and Pol. Sci., Feb., 1940. Pp. 17.
Rist, C. *Necrologie: Edwin R. A. Seligman.* Rev. d'Econ. Pol., Sept.-Dec., 1939. Pp. 4.
Robertson, D. H. *A Spanish contribution to the theory of fluctuations.* Economica, Feb., 1940. Pp. 16.
Schultz, T. W. *Needed additions to the theoretical equipment of an agricultural economist.* Jour. Farm Econ., Feb., 1940. Pp. 6.
Signorelli, G. *Tendenze rinnovatrici della scienza economica e l'interesse collettivo.* Riv. di Pol. Econ., Feb., 1940. Pp. 22.
Smith, R. H. *Problems of price control.* So. African Jour. Econ., Dec., 1939. Pp. 23.
Somers, H. M. *Money wage cuts in relation to unemployment: a rejoinder to Mr. Kaldor.* Rev. Econ. Stud., Feb., 1940. Pp. 2.
Staehle, H. *Elasticity of demand and social welfare.* Quart. Jour. Econ., Feb., 1940. Pp. 15.
Tanaka, K. *On Prof. Hayek's theory of trade cycle.* Jour. Kobe Univ. of Commerce, Dec., 1939. Pp. 30.
Taviani, P. E. *Cournot e il positivismo.* Riv. Internaz. di Sci. Soc., Jan., 1940. Pp. 13.
Tinbergen, J. *Econometric business cycle research.* Rev. Econ. Stud., Feb., 1940. Pp. 18.
Viner, J. *The short view and the long in economic policy.* Am. Econ. Rev., Mar., 1940. Pp. 15.
Weinberger, O. *The importance of Francesco Ferrara in the history of economic thought.* Jour. Pol. Econ., Feb., 1940. Pp. 14.
Welinder, C. *Grundzüge einer dynamischen Inzidenztheorie.* Weltwirtschaft. Archiv, Jan., 1940. Pp. 43.
Wilson, E. B. *Methodology in the natural and the social sciences.* Am. Jour. Soc., Mar., 1940. Pp. 14.
Wolfe, A. B. *Why economists disagree.* Jour. Soc. Philos., Apr., 1940. Pp. 8.
Yntema, T. O. *Cost functions and their relation to imperfect competition.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 3.

Economic History and Geography

Barbour, V. *Rigidities affecting business in the sixteenth and seventeenth centuries.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 8.
Broek, J. O. M. *The economic development of the outer provinces of the Netherlands Indies.* Geograph. Rev., Apr., 1940. Pp. 14.

CARSOW, M. *L'Afrique* (suite). Jour. des Econ., Nov.-Dec., 1939. Pp. 7.
GRAS, N. S. B. *The growth of rigidities.* Harvard Bus. Rev., Spring, 1940. Pp. 15.
———. *Growth of rigidity in business: during the Middle Ages.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 9.
HAMILTON, E. J. *Growth of rigidity in business during the eighteenth century.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 8.
HARVILL, R. A. *The economy of the South.* Jour. Pol. Econ., Feb., 1940. Pp. 29.
HEATON, H. *Rigidity in business since the Industrial Revolution* (with discussions by Rudolf A. Clemen and Rufus S. Tucker). Am. Econ. Rev. Suppl., Mar., 1940. Pp. 11.
JAMES, F. C. *The Bank of North America and the financial history of Philadelphia.* Pa. Mag. of Hist. and Biog., Jan., 1940. Pp. 32.
LAUFENBURGER, H. *La vie économique en Allemagne.* Rev. d'Econ. Pol., Sept.-Dec., 1939. Pp. 57.
McCLURKIN, A. J. *Summary of the Bank of North America records.* Pa. Mag. of Hist. and Biog., Jan., 1940. Pp. 9.
MISRA, B. R. *Proprietary tenures in Oudh: a historical survey.* Indian Jour. Econ., Jan., 1940. Pp. 20.
MOSK, S. A. *A railroad to Utopia.* Southwest Soc. Quart. Jour., Dec., 1939. Pp. 17.
SCHRIEKE, J. J. *Plural economy and federative society.* Bull. Colonial Inst. of Amsterdam, Dec., 1939. Pp. 10.
Graphical survey of economic developments. Rev. Econ. Stat., Feb., 1940. Pp. 4.
The trend of business in New Zealand. Bull. Canterbury Chamber of Comm., Dec., 1939. Pp. 4.

Agriculture, Mining, Forestry, and Fisheries

AHLFELD, H. *Entwicklungstendenzen und Strukturwandlungen der Weltzuckerwirtschaft in den letzten fünfundzwanzig Jahren.* Weltwirtschaft. Archiv, Jan., 1940. Pp. 30.
ALLIN, B. W. *County planning project—a coöperative approach to agricultural planning* (with discussions by John D. Black, P. V. Kepner, D. W. Watkins and H. C. Ramsower). Jour. Farm Econ., Feb., 1940. Pp. 25.
ALSBERG, C. L. *Nature and scope of training for men contemplating work in the field of agricultural economics.* Jour. Farm Econ., Feb., 1940. Pp. 8.
BARNES, K. *Fisheries, mainstay of Soviet-Japanese friction.* Far East. Survey, Mar. 27, 1940. Pp. 6.
BLOCH, K. *Rubber and tin trends reflect war conditions.* Far East. Survey, Mar. 27, 1940. Pp. 2.
VAN DEN BROEK, J. *The Netherlands Indies as a producer of tin.* Bull. Colonial Inst. of Amsterdam, Dec., 1939. Pp. 18.
V. CIRIACY-WANTRUP, S. *The relation of war economics to agriculture with particular reference to the effects of income and price inflation and deflation.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 17.
DAVIS, C. C. *Place of farmers, economists and administrators in developing agricultural policy.* Jour. Farm Econ., Feb., 1940. Pp. 9.
DUGGAN, I. W. *Cotton, land, and people: a statement of the problem.* Jour. Farm Econ., Feb., 1940. Pp. 10.
FIEDLER, R. H. *Fisheries of North America with special reference to the United States.* Geograph. Rev., Apr., 1940. Pp. 14.
GRIMES, W. E. *Personnel training and recruitment in agricultural economics* (with discussion by O. B. Jesness). Jour. Farm Econ., Feb., 1940. Pp. 6.
HALL, R. B. *American raw-material deficiencies and regional dependence.* Geograph. Rev., Apr., 1940. Pp. 10.
HENDRICKSON, R. F. *New developments in personnel selection, training and advancement in the federal service.* Jour. Farm Econ., Feb., 1940. Pp. 11.
HOBSON, A. *War adjustments for American agriculture.* Jour. Farm Econ., Feb., 1940. Pp. 11.

HOFFMAN, A. C. *Changing organization of agricultural markets.* Jour. Farm. Econ., Feb., 1940. Pp. 11.
HOPKINS, J. A. *The scale of agricultural production—some corrections* (with a rejoinder by John D. Black). Quart. Jour. Econ., Feb., 1940. Pp. 4.
JENKINS, W. B. *Agricultural census of 1940.* Jour. Farm Econ., Feb., 1940. Pp. 9.
KING, A. J. and SIMPSON, G. D. *New developments in agricultural sampling.* Jour. Farm Econ., Feb., 1940. Pp. 9.
KULL, W. *The problems of Swiss agricultural policy.* Ekonomist, Sept.-Oct., 1939. Pp. 8.
LATTIMER, J. E. *The British bacon agreement.* Canadian Jour. Econ. and Pol. Sci., Feb., 1940. Pp. 8.
MOSK, S. A. *Subsidized hemp production in Spanish California.* Agric. Hist., Oct., 1939. Pp. 5.
MURRAY, W. G. *How should agriculture be financed?* Jour. Farm Econ., Feb., 1940. Pp. 10.
NORTON, L. J. *When and under what conditions should a mortgage on a farm be foreclosed?* Jour. Farm Econ., Feb., 1940. Pp. 7.
PABST, W. R., JR. *Monopolistic expectations and shifting control in the anthracite industry.* Rev. Econ. Stat., Feb., 1940. Pp. 8.
PETERSON, A. G. *Agriculture in the United States, 1839 and 1939* (with discussions by H. C. M. Case, Stanley W. Warren, G. W. Forster, D. Curtis Mumford and R. S. Kifer). Jour. Farm Econ., Feb., 1940. Pp. 40.
PORTER, C. *United States tobacco quotas already felt in Philippines.* Far East. Survey, Feb. 28, 1940. Pp. 2.
QURESHI, A. I. *Marketing of agricultural produce.* Indian Jour. Econ., Jan., 1940. Pp. 28.
RACINES, E. O. *Aspectos económicos de la explotación del petróleo en Colombia.* Rev. de Fomento, Oct.; 1939. Pp. 11.
ROWE, H. B. *Economic significance of changes in market organization* (with discussion by T. G. Stitts). Jour. Farm Econ., Feb., 1940. Pp. 15.
SINGH, S. A. *A statistical analysis of factors affecting gross return of some farms in the Punjab.* Indian Jour. Econ., Jan., 1940. Pp. 22.
SMITH, A. *The waste lands of Britain.* Fabian Quart., Winter, 1939-40. Pp. 6.
STARCH, E. A. *Supervised farming.* Jour. Farm Econ., Feb., 1940. Pp. 5.
TAYLOR, G. R. *State laws which limit competition in agricultural products.* Jour. Farm Econ., Feb., 1940. Pp. 8.
TAYLOR, H. C. *Early history of agricultural economics.* Jour. Farm Econ., Feb., 1940. Pp. 14.
TINLEY, J. M. *Agricultural adjustment policies in America.* So. African Jour. Econ., Dec., 1939. Pp. 21.
WAUGH, F. V. *Programs for using agricultural surpluses to reduce malnutrition and to benefit farmers* (with discussions by Norman L. Gold, Hazel K. Stiebeling and George J. Stigler). Jour. Farm Econ., Feb., 1940. Pp. 17.
WELLS, O. V. *Agricultural surpluses and nutritional deficits: a statement of the problem and some factors affecting its solution.* Jour. Farm Econ., Feb., 1940. Pp. 7.
WHITE, B. S., JR. *The shrinking foreign market for United States cotton.* Quart. Jour. Econ., Feb., 1940. Pp. 22.
WILSON, M. L. *Problem of poverty in agriculture* (with discussions by J. I. Falconer and Dwight Sanderson). Jour. Farm Econ., Feb., 1940. Pp. 24.
YOUNG, E. C. *Use of the normal value concept as a stabilizing influence in agriculture* (with discussions by F. F. Hill and Claude L. Benner). Jour. Farm Econ., 1940. Pp. 14.
American agriculture, 1933-1940: an appraisal. Index, N.Y. Trust Co., Spring, 1940. Pp. 13.
Average prices received by farmers in the United States, 1929-39. Crops and Markets, Dec., 1939.
Meeting of the American Members of the Permanent Agricultural Committee. Internat. Lab. Rev., Mar., 1940. Pp. 7.
The war and raw materials of the textile industry. Weekly Report, German Inst. for Bus. Res., Jan. 4, 1940. Pp. 4.

Manufacturing Industries

CASPER, K. *Zur Frage des Ausbaus der Textilwirtschaft junger Industrieländer. V. Die Textilindustrialisierung in Rumänien.* Weltwirtsch. Archiv, Jan., 1940. Pp. 28.

LONG, C. D., JR. *News print: costs and competition.* Harvard Bus. Rev., Spring, 1940. Pp. 12.

Air conditioning. Banking, Mar., 1940. Pp. 4.

Transportation and Communication

BAKER, G. P. *The possibilities of economies by railroad consolidation and coördination.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 18.

BINGHAM, H. M. *Notes on practice before the Federal Communications Commission.* Michigan Law Rev., Jan., 1940. Pp. 18.

BINKERD, R. S. *Our railroads: can they haul the load?* Atlantic Mo., Apr., 1940.

BORG, D. *New rail links in unoccupied China.* Far East. Survey, Jan. 17, 1940. Pp. 2.

EASTMAN, J. B. *The adjustment of rates between competing forms of transportation.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 6.

FEASEL, F. *What highway audits should cover* (with discussion by J. H. Dorroh). New Mexico Bus. Rev., Jan., 1940. Pp. 7.

HARDING, W. B. *Air transportation rates.* Harvard Bus. Rev., Spring, 1940. Pp. 7.

HERRING, J. M. *Broadcasting and the public interest.* Harvard Bus. Rev., Spring, 1940. Pp. 13.

MACMAHON, A. W. and DITTMAR, W. R. *Autonomous public enterprise—the German railways.* II. Pol. Sci. Quart., Mar., 1940. Pp. 28.

MECK, J. F. and MASTEN, J. E. *Railroad leases and reorganization.* I. Yale Law Jour., Feb., 1940. Pp. 34.

MORGAN, C. S. *Aspects of the problem of public aids to transportation.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 10.

ORMSBEE, R. L. *Financing New Mexico highways.* New Mexico Bus. Rev., Jan., 1940. Pp. 4.

PASCHEN, W. *Das Verkehrswesen der Südafrikanischen Union seit dem Krisenjahr 1933.* Archiv f. Eisenbahnw., Nov.-Dec., 1939. Pp. 54.

RADEMAKER, E. G. *Die New York Central Eisenbahn.* Archiv f. Eisenbahnw., Nov.-Dec., 1939. Pp. 26.

——————. *Die New York New Haven & Hartford Eisenbahn.* Archiv f. Eisenbahnw., Jan.-Feb., 1940. Pp. 26.

RAPER, C. L. *The St. Lawrence Waterway.* Current Hist., Mar., 1940. Pp. 2.

REMY. *Die Verkehrsentwicklung in den deutsch-afrikanischen Kolonien unter der Mandatsherrschaft.* Archiv f. Eisenbahnw., Mar.-Apr., 1940. Pp. 132.

ROBERTS, M. J. *Recent innovations in railroad freight and passenger equipment.* Jour. Bus. Univ. Chicago, part 1, Jan., 1940. Pp. 18.

VELIE, L. *Lean years for the railroads.* Dun's Rev., Feb., 1940. Pp. 8.

WARNER, H. P. *Subjective judicial review of the Federal Communications Commission.* Michigan Law Rev., Mar., 1940. Pp. 49.

WERNEKKE. *Die Eisenbahnen der Vereinigten Staaten von 1928 bis 1937.* Archiv f. Eisenbahnw., Nov.-Dec., 1939. Pp. 12.

DE WILDE, J. C. *The war and American shipping.* Foreign Policy Rep., Apr. 1, 1940. Pp. 11.

State highway construction. Amer. Petroleum Tax Econ. Bull., Feb., 1940. Pp. 6.

Trade, Commerce, and Commercial Crises

BELSHAW, H. *Import and exchange control in New Zealand.* Econ. Record, Dec., 1939. Pp. 14.

BIDWELL, P. W. *Problems of American commercial policy.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 6.

Blouin, M. F. *The $6 billion tourist business.* Banking, Mar., 1940. P. 1.
Brown, R. C. *The legal aspects of trade barriers.* Bull. Nat. Tax Assoc., Jan., 1940. Pp. 6.
Capper, A. *Reciprocal trade agreements—markets depend upon purchasing power.* Vital Speeches, Feb. 1, 1940. Pp. 2.
Chalmers, H. *Foreign tariffs and commercial policies during 1939.* Commerce Rep. no. 5, Feb. 3, 1940.
Gideonse, H. D. *The relation of American foreign-trade policy to New Deal domestic policy.* Am. Econ. Rev., Mar., 1940. Pp. 11.
Grady, H. F. *The present need for a sane commercial policy.* Vital Speeches, Jan. 15, 1940. Pp. 4.
Hillmann, H. C. *Analysis of Germany's foreign trade and the war.* Economica, Feb., 1940. Pp. 23.
Mauldon, F. R. E. and Anderson, D. L. *Terms of exchange of industry groups.* Econ. Record, Dec., 1939. Pp. 14.
Rosinger, L. K. *U.S.S.R. and Japan to improve trade relations.* Far East. Survey, Jan. 31, 1940. Pp. 3.
Schwenger, R. B. *A decade of exports and imports (1930-39).* Agric. Situation, Jan., 1940.
Snyder, R. C. *The most favored nation clause and recent trade practices.* Pol. Sci. Quart., Mar., 1940. Pp. 21.
Spurr, W. A. *Seasonal variations in the economic activities of Japan.* Univ. Studies, Neb., Mar., 1940.
Stolper, G. *The blockade problem.* Yale Rev., Spring, 1940. Pp. 26.
Stone, J. *The legal setting of import control.* Econ. Record, Dec., 1939. Pp. 10.
Tremaine, H. M. *The struggle for world trade.* Mag. of Wall Street, Feb. 24, 1940. Pp. 5.
Wallace, H. A. *Agriculture and trade agreements. The farmers are entitled to effective protection.* Vital Speeches, Feb. 1, 1940. Pp. 4.
Witherow, G. A. *United States foreign trade in 1939.* Commerce Rep. no. 6, Feb. 10, 1940.
Credit and trade in 1939. Bankers' Insur. Manag. and Agents' Mag., Feb., 1940. Pp. 10.
Export policy. Economist (London), Mar. 9, 1940.
The importance of the export trade in wartime. Accountants Mag., Feb., 1940.
Notes on statistical tables, October, 1939. Chinese Econ. and Stat. Rev., Nov., 1939. Pp. 17.
Trends in our foreign trade since the war began. Guaranty Survey, Apr., 1940.
War and international trade. Statist, Feb. 17, 1940.

Accounting, Business Methods, Investments, and the Exchanges

Alvord, E. C. and Biegel, H. C. *Basis provisions for stock dividends under the 1939 Revenue act.* Yale Law Jour., Mar., 1940. Pp. 40.
Atkins, P. *The relationship of costs to prices.* N.A.C.A. Bull., sec. i, Mar. 15, 1940. Pp. 18.
Baker, J. C. *Pensions for executives.* Harvard Bus. Rev., Spring, 1940. Pp. 13.
Barnard, C. I. *Comments on the job of the executive.* Harvard Bus. Rev., Spring, 1940. Pp. 14.
Bergen, H. B. *Management prerogatives.* Harvard Bus. Rev., Spring, 1940. Pp. 10.
Bradbury, K. F. *Job evaluation analyzed.* Advanced Manag., Jan.-Feb.-Mar., 1940. Pp. 5.
Brett, A. C. *The role of the accountant in the control of distribution costs.* N.A.C.A. Bull., sec. i, Apr. 1, 1940. Pp. 16.
Brink, V. Z. *The need for single-purpose statements.* Jour. Accountancy, Apr., 1940. Pp. 9.
Brown, G. H. and Mancina, F. A. *A note on the relationship between sales and advertising of department stores.* Jour. Bus. Univ. Chicago, part 1, Jan., 1940. Pp. 16.
Clark, N. B. *Fixed and variable elements in selling costs.* N.A.C.A. Bull., sec. i, Apr. 1, 1940. P. 11.
Cooke, M. L. and Murray, P. *Management and organized labor—a dialogue between two authors.* Advanced Manag., Jan.-Feb.-Mar., 1940. Pp. 7.
Couchman, C. B. *Realism in accounting.* Jour. Accountancy, Apr., 1940. Pp. 11.

DAINES, H. C. *Theory and procedure for pooled investments in colleges and universities.* Jour. Accountancy, Feb., 1940. Pp. 17.

DAVISON, J. F. *The place of the Federal Trade Commission in administrative law.* Geo. Washington Law Rev., Jan., 1940.

DAWSON, W. A. *The ratio control system for hospitals.* Jour. Accountancy, Feb., 1940. Pp. 2.

DUDLEY, R. G. and EVANS, W. H. *Public utility financing in the fourth quarter of 1939 and a summary of the year, 1939.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 6.

FUKUDA, K. *From market adjustment to planned distribution. Aspect of Japan's wartime economics.* Jour. Kobe Univ. of Commerce, Dec., 1939. Pp. 24.

GEORGE, E. B. *The Robinson-Patman act begins to acquire meaning.* Dun's Rev., Mar., 1940. Pp. 9.

GLAESER, M. G. *The Wisconsin telephone case.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 10.

GRETHER, E. T. *Price control under "fair trade" legislation.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 6.

HAUN, R. D. *Inconsistencies in public utility depreciation: deduction of depreciation for rate base purposes.* Michigan Law Rev., Feb., 1940. Pp. 25.

HAY, E. N. *The compa-ratio, a means of control of salary expense.* Advanced Manag., Jan.-Feb.-Mar., 1940. Pp. 3.

HILL, J. A. *Basic standard cost accounting employing the use of cost ratios.* N.A.C.A. Bull., sec. i, Feb. 1, 1940. Pp. 11.

HON, R. C. *The Memphis Power and Light deal.* So. Econ. Jour., Jan., 1940. Pp. 32.

HUBBARD, J. B. *Industrial bond and preferred stock refundings, 1933-1937.* Rev. Econ. Stat., Feb., 1940. Pp. 28.

JASSPON, W. H. *The economic function of speculation.* Vital Speeches, Apr. 1, 1940. Pp. 4.

JEUCK, J. E. *Direct-mail advertising to doctors.* Jour. Bus. Univ. Chicago, part 1, Jan., 1940. Pp. 22.

JOHNSON, R. L. *Behavior of industrial earnings.* Banking, Mar., 1940. Pp. 2.

KOHL, C. N. *Budgeting for control.* N.A.C.A. Bull., sec. i, Feb. 15, 1940. Pp. 12.

KRAJČEVIĆ, F. *The system of planned accounting.* Ekonomist, Sept.-Oct., 1939. Pp. 13.

LENHART, N. J. and WILCOX, E. B. *Single-purpose statements.* Jour. Accountancy, Mar., 1940. Pp. 4.

LILIENTHAL, D. E. *Administrative decentralization of federal functions.* Advanced Manag., Jan.-Feb.-Mar., 1940. Pp. 6.

MAGOR, D. M. *Distributor accounting procedure for planned profit control.* N.A.C.A. Bull., sec. i, Jan. 15, 1940. Pp. 16.

DEL MARMOL, C. *Le financement de la vente à tempérament dans le commerce de détail en Belgique.* 2^{e} partie. Annales de la Soc. Sci. de Bruxelles, Oct.-Dec., 1939. Pp. 20.

MASCARICH, F. *A system of numbers for time study engineers.* Advanced Manag., Jan.-Feb.-Mar., 1940. P. 1.

MAYNARD, H. B. *Trends in cost reduction.* Advanced Manag., Jan.-Feb.-Mar., 1940. Pp. 5.

MCEACHREN, J. W. *Can standard costs be standardized?* N.A.C.A. Bull., sec i, Feb. 1, 1940. Pp. 12.

MOORE, F. G. *Time in process—its effect on the economy of manufacturing.* Advanced Manag., Jan.-Feb.-Mar., 1940. Pp. 5.

MOREY, L. *Federal accounting and reporting.* Jour. Accountancy, Mar., 1940. Pp. 8.

MORTENSON, W. P. II. *Legal possibilities and limitations of milk distribution as a public utility.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 11.

MUND, V. A. *The "freight allowed" method of price quotation.* Quart. Jour. Econ., Feb., 1940. Pp. 14.

NOLAN, E. *Accounting for the admissions and retirements of partners.* I, II. Jour. Accountancy, Feb., Mar., 1940. Pp. 21, 13.

PICKEL, W. T. *Earnings of municipally-owned public utilities* (with discussions by Glenn Stimmel and Floyd T. Kennedy). New Mexico Bus. Rev., Jan., 1940. Pp. 11.

REITELL, C. *Newer fields in cost application.* N.A.C.A. Bull., sec. 1, Mar. 15, 1940. Pp. 10.

Riley, R. H. *Is fair return appropriate for municipal utilities?* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 9.
Ruttenberg, H. J. *The fruits of industrial peace.* Harvard Bus. Rev., Spring, 1940. Pp. 10.
Saliers, E. A. *Depreciation inventoried* (with rejoinder by R. L. Dixon, Jr.). Jour. Bus. Univ. Chicago, part 1, Jan., 1940. Pp. 3.
Shulman, H. *The Fair Trade acts and the law of restrictive agreements affecting chattels.* Yale Law Jour., Feb., 1940. Pp. 19.
Snyder, R. W. *The courts and the theory of interest.* Jour. Accountancy, Apr., 1940. Pp. 12.
Stoddard, W. L. *Small business wants capital.* Harvard Bus. Rev., Spring, 1940. Pp. 10.
Sweet, H. N. *Amended requirements for financial statements prescribed by the Securities and Exchange Commission in regulation S-X.* Jour. Accountancy, Mar., 1940. Pp. 8.
Tead, O. *Is industrial self-government possible?* Advanced Manag., Jan.-Feb.-Mar., 1940. Pp. 6.
Thatcher, L. W. II. *Financial and depreciation history of the Utah Power and Light Company.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 7.
Thorp, W. L. and Russell, H. B. *Inventories during the World War—the record of 111 companies.* Dun's Rev., Feb., 1940. Pp. 6.
Van Duyne, L. R. *Accounting control at a race track.* N.A.C.A. Bull., sec. 1, Mar 1, 1940. Pp. 32.
Walker, R. G. *Explorations in accounting.* Harvard Bus. Rev., Spring, 1940. Pp. 13.
Wilcox, E. B. *What's wrong with accounting—a reply.* Advanced Manag., Jan.-Feb.-Mar., 1940. Pp. 4.
Young, R. A. and Bernstein, B. *Who buys what on the installment plan?* Dun's Rev., Feb., 1940. Pp. 8.
Finished goods inventory practice. N.A.C.A. Bull., sec. iii, Mar. 15, 1940. Pp. 30.
Inventories and receivables of department stores, instalment houses, chain stores, and other retailers. Jour. Accountancy, Feb., 1940. Pp. 3.
The proposed federal sales act, a symposium. Va. Law Rev., Mar., 1940.
Survey of business opinion. Conf. Bd. Econ. Record, Jan. 23, 1940. Pp. 3.
Survey of business trends—1939; sales and inventories. Dun's Rev., Mar., 1940. Pp. 10.

Capital and Capitalistic Organization

Ackerman, R. H. *Regulations of new industries in Spain.* Compar. Law Series, Dept. of Comm., Jan., 1940. Pp. 8.
Anderson, B. M., Jr. *Governmental economic planning.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 16.
Arnold, T. *The Sherman antitrust law enforcement, past and future.* Law and Contemp. Problems, Winter, 1940. Pp. 19.
Berge, W. *Some problems in the enforcement of the antitrust laws.* Michigan Law Rev., Feb., 1940. Pp. 17.
Edwards, E. D. *Can the antitrust laws preserve competition?* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 16.
Gray, H. M. *The passing of the public utility concept.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 13.
Homan, P. T. *In what areas should antitrust policy be replaced?* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 14.
Kaneda, K. *Political and economic characteristics of Japan's colonies.* Jour. Kobe Univ. of Commerce, Dec., 1939. Pp. 31.
Mason, E. S. *Preserving competition versus regulating monopoly.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 6.
O'Daniel, E. V. *Competition, production and costs.* Conf. Bd. Econ. Record, Jan. 25, 1940. Pp. 7.
Schmidt, C. T. *Concentration of joint-stock enterprise in Italy.* Am. Econ. Rev., Mar., 1940. Pp. 5.

WALLACE, D. *Kinds of public control to replace or supplement antitrust laws.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 19.

The economic independence of South Eastern Europe. Weekly Rep., German Inst. for Bus. Res., Feb. 19, 1940. Pp. 5.

Labor and Labor Organizations

ANDREWS, E. F. *Hidden labor costs.* Dun's Rev., Feb., 1940. Pp. 4.

BENHAM, F. *Unemployment and business cycle in Great Britain.* Ekönomist, Sept.-Oct., 1939. Pp. 4.

BLUM, R. *Exemption of small rural telephone companies from the Wage and Hour act.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 4.

CATAPUSAN, B. T. *The Filipinos and the labor unions.* Am. Fed., Feb., 1940. Pp. 4.

DANKERT, C. E. *Views on machinery and unemployment.* Scientific Mo., Feb., 1940. Pp. 8.

FELS, B. and WHELPTON, P. K. *An industrial classification for reports from individuals.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 12.

FORSYTH, W. D. *Near future requirements of immigrant labour supplies in Australia.* Econ. Record, Dec., 1939. Pp. 7.

GAMBS, J. S. *Peace objectives of European trade unionism: first approximation.* Pol. Sci. Quart., Mar., 1940. Pp. 5.

GORDON, M. L. *Wisconsin's experiment to combat company unionism.* Am. Fed., Jan., 1940. Pp. 5.

GREEN, W. *Amend the National Labor Relations act.* Vital Speeches, Mar. 1, 1940. Pp. 4.

GULICK, C. A., JR. and GERSCHENKRON, A. *Errors and traditions.* (Remarks on Ernst Karl Winter's article, "The Rise and Fall of Austrian Labor.") Soc. Research, Feb., 1940. Pp. 16.

HINRICHS, A. F. *Effects of the 25-cent minimum wage on employment in the seamless hosiery industry.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 11.

VAN DER HORST, S. T. *Report of the Native Farm Labour Committee.* So. African Jour. Econ., Dec., 1939. Pp. 10.

MURRAY, P. *Unemployment, the root of America's economic ills.* Vital Speeches, Feb. 15, 1940. Pp. 3.

NISOT, M-T. *The protection of professional titles.* I, II. Internat. Lab. Rev., Jan., Feb., 1940. Pp. 17, 19.

NOVEMBER, H. *Enforcement of the Wage and Hour law.* Am. Fed., Feb., 1940. Pp. 7.

———. *Industry committees under the Fair Labor Standards act.* Am. Fed., Mar., 1940. Pp. 10.

OGISHIMA, T. *The organisation of employment in Japan.* Internat. Lab. Rev., Feb., 1940. Pp. 18.

OLIVER, H. M., JR. *Does wage reduction aid employment by lowering prices?* So. Econ. Jour., Jan., 1940. Pp. 11.

PERLMAN, J. *Extent and causes of differences in hourly earnings.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 12.

PIERSON, F. *The determination of minimum wage rates.* Am. Econ. Rev., Mar., 1940. Pp. 10.

ROSEN, J. *Die Lebenshaltung von Arbeitern in der Schweiz und in Deutschland.* Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 3 Heft, 1939. Pp. 18.

SAYRE, R. A. *Wages, hours and employment in the United States, 1934-1939.* Conf. Bd. Econ. Record, Mar. 28, 1940. Pp. 38.

VON STRUVE, A. W. *Labor and the census.* Am. Fed., Feb., 1940. Pp. 4.

TAYLOR, G. W. *Collective bargaining and job security.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 7.

VANCE, R. B. *How can the southern population find gainful employment?* Jour. Farm Econ., Feb., 1940. Pp. 8.

VOGT, P. L. *Functional industrial organization and labor incomes.* Am. Fed., Jan., 1940. Pp. 10.

de Vyver, F. T. *After the shutdown: an analysis of the job-hunting experience of a group of Durham hosiery workers.* Jour. Pol. Econ., Feb., 1940. Pp. 9.
Weiss, H. *British wage boards and the American Fair Labor Standards act.* Am. Fed., Jan., 1940. Pp. 6.
Wolman, L. *Labor policy and the volume of employment.* Vital Speeches, Jan. 15, 1940. Pp. 3.
Annual review of employment in Canada, 1939. Lab. Gazette, Feb., 1940. Pp. 3.
Eighty-eighth session of the governing body of the International Labour Office. Internat. Lab. Office Official Bull., Dec. 27, 1939. Pp. 5.
Employment and unemployment of the labor force 1900-1940. Conf. Bd. Econ. Record, Mar. 20, 1940. Pp. 15.
The employment situation in Germany. Weekly Rep., German Inst. for Bus. Res., Feb. 3, 1940. Pp. 3.
Explanatory notes: periodical statistics of employment, unemployment, hours of work, wages, and cost of living. Internat. Lab. Rev., Jan., 1940. Pp. 16.
How labor stands now (in the matter of real wages). Barron's, Apr. 1, 1940.
The influence of the war and mobilisation on hours of work and rest periods. Internat. Lab. Rev., Mar., 1940. Pp. 16.
Labour regulation in Indo-China. Internat. Lab. Rev., Jan., 1940. Pp. 10.
Military service and contracts of employment. Internat. Lab. Rev., Feb., 1940. Pp. 12.
National Labor Relations Board. Should Congress curb the power of the N.L.R.B.? Congressional Digest, Mar., 1940.
The policy of the International Labour Organisation in the present international situation. Internat. Lab. Office Official Bull., Dec. 27, 1939. Pp. 6.
The second Labour Conference of American States Members of the International Labour Organisation. Internat. Lab. Rev., Mar., 1940. Pp. 44.
The social effects of rationalisation in Sweden. Internat. Lab. Rev., Jan., 1940. Pp. 7.
Strikes and lockouts in Canada and other countries, 1939. Lab. Gazette, March., 1940. Pp. 21.
Trade unionism in Canada. Lab. Gazette, Feb., 1940. Pp. 3.
Wages, hours, employment, payrolls and earnings. Conf. Bd. Econ. Record, Feb. 10, Mar. 6, 1940. Pp. 5, 4.

Money, Prices, Credit, and Banking

Adams, E. S. *Investment objectives.* Banking, Apr., 1940. Pp. 2.
Angell, J. W. *Bank deposits and the business cycle.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 3.
Atkins, P. M. *Secondary reserve program.* Bankers Mag., Feb., 1940. Pp. 5.
Avison, T. L. *The Canadian Foreign Exchange Control Board.* Canadian Jour. Econ. and Pol. Sci., Feb., 1940. Pp. 5.
Beckhart, B. H. *Monetary policy and commercial bank portfolios.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 10.
Cory, H. A. *Administering bank personnel.* Bankers Mag., Mar., 1940. Pp. 4.
Dice, C. A. and Schaffner, P. *A reply to Mr. Villard.* Am. Econ. Rev., Mar., 1940. P. 1.
Dillard, V. *Le dilemme monétaire irlandais.* Rev. d'Econ. Pol., Sept.-Dec., 1939. Pp. 32.
Dillon, W. R. *Foreign exchange control in Canada.* Trusts and Estates, Mar., 1940. Pp. 3.
Director, A. *Does inflation change the economic effects of war?* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 11.
Ehrhardt, E. M. *The future of farm credit.* Banking, Apr., 1940. Pp. 2.
Eiteman, W. J. *Comment on "offset checks as a component of the money supply" by Mr. Villard.* Am. Econ. Rev., Mar., 1940. Pp. 2.
Ellis, H. S. *Monetary policy and investment.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 17.
Foster, S. M. *Determining interest rates.* Bankers Mag., Mar., 1940. Pp. 5.
Franklin, H. L. *British price policy and price developments in wartime.* Foreign Agric., Feb., 1940.
Garcia, F. L. *The war and banking trends.* Bankers Mag., Feb., 1940. Pp. 7.

GOLIGHTLY, T. H. *The question of a capital-deposit ratio.* Bankers Mag., Apr., 1940. Pp. 4.

GRAHAM, F. D. *Achilles' heels in monetary standards.* Am. Econ. Rev., Mar., 1940. Pp. 17.

———. *The primary functions of money and their consummation in monetary policy.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 16.

GREBLER, L. *The home mortgage structure in transition.* Harvard Bus. Rev., Spring, 1940. Pp. 15.

GREENE, F. T. *Significant post-depression changes in savings and loan practices.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 7.

HADOW, S. *Emergency legislation.* Bankers' Insur. Manag. and Agents' Mag., Jan., 1940. Pp. 7.

HARRIS, S. E. *Gold and the American economy.* Rev. Econ. Stat., Feb., 1940. Pp. 12.

HARWOOD, E. C. *Comment on a neglected component of the money supply.* Am. Econ. Rev., Mar., 1940. P. 1.

HOLDEN, G. *Rationing and exchange control in British war finance.* Quart. Jour. Econ., Feb., 1940. Pp. 30.

JONKMANS, V. *De l'importance des variations de prix des produits agricoles dans l'index des prix de détail.* Annales de la Soc. Sci. de Bruxelles, Oct.-Dec., 1939. Pp. 23.

KOTOUC, O., and others. *Government invasion of banking.* Bankers Mag., Mar., 1940. Pp. 4.

LEACOCK, S. *Other people's money. An outside view of trusts and investments.* Trusts and Estates, Jan., 1940. Pp. 6.

MACHLUP, F. *Bank deposits and the stock market in the cycle.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 9.

MAY, A. W. *The financial world of 1940.* Trusts and Estates, Mar., 1940. Pp. 5.

PORTER, C. *Philippine gold output reaches new high.* Far East. Survey, Feb. 14, 1940. P. 1.

PREST, W. *Price control.* Econ. Record, Dec., 1939. Pp. 4.

SELTZER, L. H. *The problem of our excessive banking reserves.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 13.

SOMERHAUSEN, M. *Le crédit aux classes moyennes aux États-Unis.* Annales des Sci. Comm. et Écon., 4e Année, No. 1, 1940. Pp. 21.

TIRANA, R. *Behavior of bank deposits abroad.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 14.

TUTTLE, F. W. *Society's stake in commercial banks.* Soc. Sci., Apr., 1940.

WADSWORTH, J. E. *Authorised dealers.* Bankers' Insur. Manag. and Agents' Mag., Jan., 1940. Pp. 6.

WATKINS, L. L. *Banking reform through supervisory standards.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 11.

WEBSTER, J. E. *Price levels and prosperity.* Advanced Manag., Jan.-Feb.-Mar., 1940. Pp. 5.

WHEELER, O. P. *The trend of interest rates.* Bankers Mag., Apr., 1940. Pp. 6.

WILCOX, F. E. *A statistical study of credit unions in New York.* Jour. Bus. Univ. Chicago, part 2, Jan., 1940. Pp. 91.

The bank balance sheets. Bankers' Insur. Manag. and Agents' Mag., Feb., 1940. Pp. 10.

Bankers' views on the situation and outlook. Bankers' Insur. Manag. and Agents' Mag., Mar., 1940. Pp. 13.

The banking year. Bankers' Insur. Manag. and Agents' Mag., Jan., 1940. Pp. 8.

Die Bilanz der schweizerischen Banken 1938. Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 3 Heft, 1939. Pp. 4.

Canada's foreign exchange control. Bankers Mag., Feb., 1940. Pp. 3.

Credit expansion and overseas funds. Bull. Canterbury Chamber of Comm., Jan., 1940. Pp. 4.

Foreign exchange rates. Jour. Accountancy, Feb., 1940. Pp. 2.

The latest banking fusion. Bankers' Insur. Manag. and Agents' Mag., Feb., 1940. Pp. 7.

The market in free sterling. Economist (London), Feb. 24, Mar. 2, 1940.

The problem of idle money. Guaranty Survey, Mar., 1940.

Sources of a bank's lending power. Fed. Res. Bull., Feb., 1940.

War-time price control in Germany, France and Great Britain. Weekly Rep., German Inst. for Bus. Res., Mar. 13, 1940. Pp. 6.

Public Finance, Taxation, and Tariff

Alfsen, F. A. M. *Supplementary levy on Swedish 1939 income tax and other budget measures.* Compar. Law Series, Dept. of Comm., Feb., 1940. Pp. 5.

Angelopoulos, A. *Finances publiques et conjoncture.* Rev. de Sci. et de Légis. Finan., July-Dec., 1939. Pp. 38.

Apchie, M. *Le prélèvement sur le capital en Italie.* Rev. d'Econ. Pol., Sept.-Dec., 1939. Pp. 14.

Baker, J. A. *The graduated farm land transfer stamp tax.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 9.

Barkmeier, J. H. *Summary of British taxation.* Compar. Law Series, Dept. of Comm., Jan., 1940. Pp. 16.

Bennett, J. J., Jr. *Federal taxation of state and municipal bonds.* Vital Speeches, Mar. 1, 1940. Pp. 2.

Bladen, V. W. *Tariff policy and employment in depression.* Canadian Jour. Econ. and Pol. Sci., Feb., 1940. Pp. 7.

Bowen, I. *The alternative to Keynes.* Fabian Quart., Winter, 1939-40. Pp. 7.

Brindley, J. E. *Iowa taxation and the public school system.* Bull. Nat. Tax Assoc., Mar., 1940. Pp. 9.

Brown, G. H. *A note on federal taxation of chain stores.* Jour. Bus. Univ. Chicago, part 1, Jan., 1940. Pp. 13.

Brown, H. G. *The incidence of taxation.* Amer. Econ. Rev. Suppl., Mar., 1940. Pp. 6.

Brownfield, A. D. *The effect of government land purchases on county finances* (with discussion by Ralph Charles). New Mexico Bus. Rev., Jan., 1940. Pp. 12.

Cady, T. S. *Federal tax matters.* Banking, Mar., 1940. P. 1.

Carter, G. S. *Excise taxes, a necessity in New Mexico* (with discussion by J. R. McCollum). New Mexico Bus. Rev., Jan., 1940. Pp. 9.

Case, J. H. *Business and the budget.* Vital Speeches, Apr. 1, 1940. Pp. 2.

Chrétien, M. *La contribution nationale extraordinaire.* Rev. de Sci. et de Légis. Finan., July-Dec., 1939. Pp. 73.

Culp, M. S. *The powers of a court of equity in state tax litigation.* Michigan Law Rev., Mar., 1940. Pp. 22.

Demay, G. *La crise des finances communales.* Rev. de Sci. et de Légis. Finan., July-Dec., 1939. Pp. 67.

van Doorninck, A. *De huidige stand onzer Staatsfinanciën.* De Econ., Feb., 1940. Pp. 15.

Eastman, E. L. *Tax computation in an estate with a charitable remainder.* Jour. Accountancy, Mar., 1940. Pp. 3.

Farr, N. C. *The fallacies of chain store taxation.* Vital Speeches, Apr. 1, 1940. Pp. 2.

Gibson, A. H. *War finance and its aftermath.* Bankers' Insur. Manag. and Agents' Mag., Mar., 1940. Pp. 17.

Grissom, R. H. *Bonds vs. pay-as-you-go for school improvements* (with discussion by John Milne). New Mexico Bus. Rev., Jan., 1940. Pp. 4.

Guthrie, G. L. *Stimulating citizen interest in government costs.* New Mexico Bus. Rev., Jan., 1940. Pp. 5.

Hall, J. K. *Incidence of death duties.* Am. Econ. Rev., Mar., 1940. Pp. 14.

Harriss, C. L. *Taxes and philanthropy—the government subsidy of charity.* Trusts and Estates, Feb., 1940. Pp. 5.

Maxwell, J. A. *The recent history of the Australian Loan Council.* Canadian Jour. Econ. and Pol. Sci., Feb., 1940. Pp. 17.

McAnear, B. *Mr. Robert R. Livingston's reasons against a land tax.* Jour. Pol. Econ., Feb., 1940. Pp. 28.

Miller, C. S. *A comparative analysis of the Nebraska "White Spot."* Bull. Nat. Tax Assoc., Feb., 1940. Pp. 13.

Morris, S., Jr. *Business taxes in Uruguay.* Compar. Law Series, Dept. of Comm., Mar., 1940. Pp. 14.

Owens, J. E. *Problems in selling public bonds.* New Mexico Bus. Rev., Jan., 1940. Pp. 6.

PAUL, R. E. *Use and abuse of tax regulations in statutory construction.* Yale Law Jour., Feb., 1940. Pp. 26.

PETTENGILL, R. B. *Division of the tax burden among income groups in the United States in 1936.* Am. Econ. Rev., Mar., 1940. Pp. 12.

ROBBINS, L. *How Britain will finance the war.* Foreign Affairs, Apr., 1940. Pp. 10.

SHOUP, C. *Married couples compared with single persons under the income tax.* Bull. Nat. Tax Assoc., Feb., 1940. Pp. 6.

TAYLOR, H. *What should county and municipal audits cover?* (With discussion by C. M. Botts, Jr.) New Mexico Bus. Rev., Jan., 1940. Pp. 8.

TROXEL, C. E. *Shifting of public utility taxes.* Bull. Nat. Tax Assoc., Jan., 1940. Pp. 7.

TUCKER, R. H. *Some aspects of intergovernmental tax exemption.* So. Econ. Jour., Jan., 1940. Pp. 18.

WATERS, L. L. *An appraisal of use taxes.* Bull. Nat. Tax Assoc., Jan., 1940. Pp. 4.

Finances de guerre de l'Angleterre. Rev. de Sci. et de Légis. Finan., July-Dec., 1939. Pp. 49.

Financing the war. Bankers' Insur. Manag. and Agents' Mag., Mar., 1940. Pp. 5.

How this income tax started. Banking, Mar., 1940. Pp. 3.

The national budget. Congressional Digest, Feb., 1940.

Public finance and exchange control. Bull. Canterbury Chamber of Comm., Feb., 1940. Pp. 4.

Segregation of special funds. Amer. Petroleum Tax Econ. Bull., Feb., 1940. P. 1.

The Supreme Court and the use tax. Tax Policy, Mar., 1940.

Vier Monate Kriegsfinanzen in England. Währ. und Wirtschaft, Jan., 1940. Pp. 3.

Population and Migration

HANSEN, A. H. *Population problems.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 16.

PEARL, R. *The aging of populations.* Jour. Am. Stat. Assoc., part ii, Mar., 1940. Pp. 21.

ROOT, T. C. *Population trends and government costs.* New Mexico Bus. Rev., Jan., 1940. Pp. 3.

SARKAR, B. K. *The population trend in India with reference to food and nutrition.* Indian Jour. Econ., Jan., 1940. Pp. 32.

TANAKA, K. *Emigration to Manchuria in the light of climatological geography.* Jour. Kobe Univ. of Commerce, Dec., 1939. Pp. 24.

WOODBURY, R. M. *The seventh census of population in Canada, 1931.* Canadian Jour. Econ. and Pol. Sci., Feb., 1940. Pp. 21.

Social Problems and Reforms

ALEXANDER, F. D. *Family life in a rural community.* Social Forces, Mar., 1940. Pp. 11.

ALTMEYER, A. J. *The new social security program in the United States.* Les Assurances Sociales Suppl., Nov.-Dec., 1939. Pp. 7.

————. *Security is good business.* Dun's Rev., Mar., 1940. Pp. 5.

BACON, E. N. *A diagnosis and suggested treatment of an urban community's land problem.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 17.

BAILEY, W. L. *Appraising urban communities: techniques and objectives.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 7.

BECKMAN, T. N. *Recent books on consumption.* Am. Econ. Rev. Suppl., Mar., 1940. P. 1.

BONN, M. J. *Planning for peace.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 9.

BORCHARD, E. *The "minimum standard" of the treatment of aliens.* Michigan Law Rev., Feb., 1940. Pp. 17.

BOWMAN, I. *Science and social effects: three failures.* Scientific Mo., Apr., 1940. Pp. 9.

BROWN, J. D. *Economic issues in social security policy.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 2.

————. *Economic problems in the provision of security against life hazards of workers.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 7.

BURNS, E. M. *Economic problems in the provision of security against employment hazards.*

Am. Econ. Rev. Suppl., Mar., 1940. Pp. 10.
COMPTON, K. T. *Science, the soul of prosperity.* Vital Speeches, Mar. 15, 1940. Pp. 4.
CONKLIN, G. *The 1940 housing census.* Am. Fed., Mar., 1940. Pp. 3.
DICKINSON, F. G. *An aftercost of the World War to the United States.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 14.
EARLE, E. M. *National security and foreign policy.* Yale Rev., Spring, 1940. Pp. 17.
ESPINOSA, A. D. *L'economica della guerra.* Economia, Feb., 1940. Pp. 7.
GLUCK, H. *Social implications of the National Labor Relations act.* Social Educ., Mar., 1940. Pp. 5.
HANWELL, N. D. and BLOCH, K. *Behind the famine in North China.* Far East. Survey, Mar. 13, 1940. Pp. 6.
HARDY, C. O. *The economics of war.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 4.
HOOVER, C. B. *What changes in national policy does the South need?* (With discussion by Francis P. Miller.) Jour. Farm Econ., Feb., 1940. Pp. 9.
KEYES, S. *Converted residences and the supply of housing.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 5.
KING, T. B. *Some factors in the economy of war—pricing, rationing, "profiteering" and control: a comment* (with a reply by C. S. Richards). So. African Jour. Econ., Dec., 1939. Pp. 6.
KNIGHT, B. *Postwar costs of a new war.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 11.
LANZILLO, A. *Preliminari ad una economia di guerra.* Giorn. d. Econ., Sept.-Oct., 1939. Pp. 12.
LEPAWSKY, A. *The new Chicago Plan Commission.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 3.
MARSHALL, G. C. *National organization for war.* Vital Speeches, Feb. 15, 1940. Pp. 3.
MASCI, G. *Die totale Bodenverbesserung in Italien.* Weltwirtsch. Archiv, Jan., 1940. Pp. 13.
MEGAPHONE. *British and German propaganda.* Fabian Quart., Winter, 1939-40. Pp. 6.
NUSSBAUM, A. *Public policy and the political crisis in the conflict of laws.* Yale Law Jour., Apr., 1940. Pp. 32.
PHILIP, A. *French economy on a war footing.* Foreign Affairs, Apr., 1940. Pp. 8.
POLLOCK, F. *Influences of preparedness on western European economic life.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 9.
DU PONT, H. B. *Industry: past, present and future.* Vital Speeches, Feb. 15, 1940. Pp. 4.
POUND, R. *An economic interpretation of the law of facts.* Harvard Law Rev., Jan., 1940.
SLICHTER, S. H. *The impact of social security legislation upon mobility and enterprise.* Am. Econ. Rev. Suppl., Mar., 1940. Pp. 17.
————. *The present nature of the recovery problem.* Vital Speeches, Jan. 15, 1940 Pp. 5.
STALEY, E. *What types of economic planning are compatible with free institutions?* (With comments by George Soule and D. C. Coyle.) Plan Age, Feb., 1940.
STRUNK, N. *Low-cost housing under the USHA experiment.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 4.
SURÁNYI-UNGER, T. *Le dilemme de la politique économique americaine.* Jour. de la Soc. Hongroise de Stat., xvii[e] Année, 1939, No. 3. Pp. 14.
TREUDLEY, M. B. *A study of American philanthropists.* Social Forces, Mar., 1940. Pp. 11.
VITO, F. *Economica di guerra e risparmio forzato.* Riv. Internaz. di Sci. Soc., Jan., 1940. Pp. 12.
WALKER, E. R. and RILEY, M. E. *Australia's war economy.* Econ. Record, Dec., 1939. Pp 12.
WEIMER, A. M. *Federal inducements for small-house construction.* Jour. Land and Pub. Econ., Feb., 1940. Pp. 2.
WRIGHT, C. M. *Housing policy in wartime.* Internat. Lab. Rev., Jan., 1940. Pp. 27.
WRISTON, H. M. *The social significance of science.* Scientific Mo., Mar., 1940. Pp. 3.
Diesel power—widening utilization. Index, N.Y. Trust Co., Spring, 1940. Pp. 6.
Housing and private capital. Banking, Feb., 1940. Pp. 3.
The position of mobilised public servants. Internat. Lab. Rev., Jan., 1940. Pp. 8.

Insurance and Pensions

BRÜCKNER, H. *Die Ursachen für den Schadenverlauf in der Feuerversicherung einiger ausserdeutscher Länder.* Weltwirtsch. Archiv, Jan., 1940. Pp. 48.
BURGER, O. E. *Agricultural insurance in South Africa.* So. African Jour. Econ., Dec., 1939. Pp. 16.
DICKINSON, F. G. *Insurance and other developments after 1940.* Vital Speeches, Feb. 1, 1940. Pp. 8.
ENGEL, H. *Die Entwicklung der Sozialversicherung in den letzten Jahren und ihre Gestaltung im Kriege.* Zeitschr. f. die Ges. Versicherungs-Wiss., Feb., 1940. Pp. 8.
GUERTIN, A. N. *Mortality tables—financial measuring rods in life insurance.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 10.
HAGEMANN, H. *Bemerkungen zur Versicherungsvertrags-Novelle vom 19.12.1939.* Zeitschr. f. die Ges. Versicherungs-Wiss., Feb., 1940. Pp. 23.
HOEHLER, F. K. *Public welfare administration in the United States.* Social Educ., Mar., 1940. Pp. 4.
MEANY, G. *What we want from unemployment compensation.* Am. Fed., Mar., 1940. Pp. 7.
SCHELLWORTH, W. *Unfallneurose und Unfallversicherung.* Zeitschr. f. die Ges. Versicherungs-Wiss., Feb., 1940. Pp. 13.
SEILER, O. *Erdbeben und Versicherung.* Zeitschr. f. die Ges. Versicherungs-Wiss., Feb., 1940. Pp. 16.
TAIT, R. C. *Collateral loans on life insurance.* Bankers Mag., Apr., 1940. Pp. 5.
WEBER, W. *Das bayerische Reservat im Immobiliar-Versicherungswesen.* Zeitschr. f. die Ges. Versicherungs-Wiss., Feb., 1940. Pp. 10.
Changes in old-age insurance. Am. Fed., Feb., 1940. Pp. 5.
The compensation of war victims: France. Internat. Lab. Rev., Feb., 1940. Pp. 14.
The compensation of war victims: Germany. Internat. Lab. Rev., Jan., 1940. Pp. 17.
The compensation of war victims: Great Britain. Internat. Lab. Rev., Mar., 1940. Pp. 15.
Federal standards for unemployment compensation. Am. Fed., Jan., 1940. Pp. 5.
Next steps in social insurance. Am. Fed., Jan., 1940. Pp. 6.
Social security for agricultural laborers. Am. Fed., Feb., 1940. Pp. 5.

Pauperism, Charities, and Relief Measures

ROBERTS, W. *Behind the Cleveland relief problem.* Bull. Nat. Tax Assoc., Mar., 1940. Pp. 8.

Socialism and Coöperative Enterprises

ABRAMSON, A. *The economic development of the Soviet Union under the second and third five-year plans.* Internat. Lab. Rev., Feb., 1940. Pp. 25.
BARNETT, R. W. *China's industrial coöperatives on trial.* Far East. Survey, Feb. 28, 1940. Pp. 6.
EDWARDS, R. H. *Bremerton trade unionists run a consumers' coöperative.* Am. Fed., Feb., 1940. Pp. 7.
IOKIBE, S. *Why are we Japanese anti-communists?* Jour. Kobe Univ. of Commerce, Dec., 1939. Pp. 20.

Statistics and Its Methods

BEAN, L. H. *The use of the short-cut graphic method of multiple correlation: comment* (with further comment by Mordecai Ezekiel; rejoinder by J. D. Black and Wilfred Malenbaum and concluding remarks by Wilfred Malenbaum). Quart. Jour. Econ., Feb., 1940. Pp. 47.
BJERKE, K. and DØSSING, P. *Ejendomssalg og Ejendomspriser.* Nationaløk. Tids., 77 Bind, 6 Hefte, 1939. Pp. 21.

BONFERRONI, C. E. *Di una estensione del coefficiente di correlazione.* Giorn. d. Econ., Nov.-Dec., 1939. Pp. 30.
BRANDT, A. E. *Practical difficulties met in the use of experimental designs.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 6.
CHERINGTON, P. T. *The uses of the census of business.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 9.
DAVIS, J. S. *The next 100 years of the American Statistical Association.* Jour. Am. Stat. Assoc., part ii, Mar., 1940. Pp. 12.
DEWEY, D. R. *The halfway point.* Jour. Am. Stat. Assoc., part ii, Mar., 1940. Pp. 5.
DUNN, H. L. *Census—past and future.* Jour. Am. Stat. Assoc., part ii, Mar., 1940. Pp. 10.
———. *Plans for vital statistics in 1940.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 7.
FREDERICK, S. H. *What will the census be worth?* Barron's, Apr. 1, 1940.
GINI, C. *I pericoli della statistica.* Riv. di Pol. Econ., Nov., 1939. Pp. 24.
GUALDONI, O. *A proposito del metodo interpolatorio delle differenze.* Giorn. d. Econ., Nov.-Dec., 1939. Pp. 6.
HOHAUS, R. A. *Actuarial problems in social insurance.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 10.
HUBER, M. *La statistique municipale en France.* Jour. de la Soc. Hongroise de Stat., xvii[e] Année, 1939, no. 3. Pp. 7.
KOLESNIKOFF, V. S. *Standard classification of industries in the United States.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 9.
KORMES, M. *Statistical methods as applied to casualty insurance.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 8.
KUZNETS, S. *National and regional measures of income.* So. Econ. Jour., Jan., 1940. Pp. 23.
LUNDBERG, G. A. *The measurement of socioeconomic status.* Sociological Rev., Feb., 1940. Pp. 11.
NEUBAUER, J. *Le montant du revenu national hongrois.* Jour. de la Soc. Hongroise de Stat., xvii[e] Année, 1939, no. 3. Pp. 31.
OGBURN, W. F. *Statistical trends.* Jour. Am. Stat. Assoc., part ii, Mar., 1940. Pp. 9.
PROUDFOOT, M. J. *New inquiries for the census of 1940.* Jour. Land and Pub. Util. Econ., Feb., 1940. Pp. 3.
———. *The United States census of 1940.* Geograph. Rev., Apr., 1940. Pp. 3.
ROGERS, C. L. and THAYER, J. M. *Economic and statistical research in private enterprise.* Conf. Bd. Econ. Record, Mar. 5, 1940. Pp. 6.
TINTNER, G. *The analysis of economic time series.* Jour. Am. Stat. Assoc., Mar., 1940. Pp. 8.
VINCI, F. *Nuovi concetti statistici nello studio della disoccupazione.* Riv. Ital. di Sci. Econ., Dec., 1939. Pp. 12.
WILLCOX, W. F. *Lemuel Shattuck, statist, founder of the American Statistical Association.* Jour. Am. Stat. Assoc., part ii, Mar., 1940. Pp. 12.
ZELENY, L. D. *Measurement of social status.* Am. Jour. Soc., Jan., 1940. Pp. 7.
The cost of living in the United States in 1939. Conf. Bd. Econ. Record, Feb. 9, 1940. Pp. 12.
Cost of living in the United States and 50 cities in January 1940. Conf. Bd. Econ. Record, Mar. 6, 1940. Pp. 2.
Proceedings of the anniversary dinner meeting (R. Pearl presiding). Jour. Am. Stat. Assoc., part ii, Mar., 1940. Pp. 4.
Savings in the national income. Conf. Bd. Econ. Record, Mar. 22, 1940. Pp. 9.

The Election Procedure of the American Economic Association

The current election of officers of the Association will be the seventh under the present method of compulsory balloting, which was adopted after considerable discussion and for fairly weighty reasons. However, nothing is perfect, and the imperfections of the present system have had time to make themselves evident to those who have been watching its operation. Some have reached the point of favoring a definite change. Therefore it seems appropriate to present the pros and cons of the question to the membership, possibly with greater emphasis on the objections to the present system, since the membership may be less familiar with them.

The original method involved the nomination of a single slate of officers by a Nominating Committee appointed by the President, and while nominations from the floor were always in order, nomination by the Committee was in effect equivalent to election. This method was perhaps appropriate to an Association with a membership, many of whom were not professional economists, while the professional economists constituted a small and fairly homogeneous group. It involved the self-perpetuating principle, and was not democratic.

As these conditions altered, the drawbacks to election by membership-ballot (which were quite real in the early days) diminished, and the ballot came to seem desirable to many as a more democratic procedure, and one that might give better representation to the growingly diverse elements among the professional economists. Thus, in 1934, the present method was adopted, whereby a Nominating Committe, appointed by the President, names two candidates for each office, from whom one is elected by mail ballot (with the privilege of writing in other names). This method has apparently accomplished some of the ends in view, and has undoubtedly had some effect, not only on the ultimate choice for office, but also on the character of the nominations themselves.

Such dissatisfaction as exists appears to center on the presidency, though there may be some minor drawbacks connected with the other offices. There is a group which believes that the presidency should be regarded as a competitive elective office like the others, and that the present procedure should therefore be retained without modification. And there is another group which holds a different view, partly in terms of the character of the office, partly in terms of the adequacy of the elective test, but mainly, perhaps, on the ground that, as the system operates, a defeated candidate is unlikely to run again and thus becomes permanently unavailable—to the detriment of the Association, which thus not only loses the services of an increasing number of first-class men, but also loses the chance to honor their achievements as they deserve. This problem may be on the point of becoming serious.

The reluctance to run a second time is quite natural, and need not be attributed to undue sensitiveness, or to any ungenerous feeling. One does not wish to appear unduly desirous of office, however little the facts might justify such a judgment. Moreover, the man who runs a second time exposes himself to the chance of being defeated a second time, and this might be a real injustice to a man of the first caliber, who might be one who should ultimately be chosen, and who may have made a close race both times against strong opposing candidates. Furthermore, logical candidates for the presidency are men with many calls on their time, and it may not be practicable for them to have their decks clear enough, in *several separate years,* to justify them in running the chance of

election to an office which is coming to make quite heavy demands on time. They may also have incurred similar liabilities as presidents of allied societies. Something may be done to increase the willingness of defeated candidates to run again, but the obstacle will remain.

It is in the light of all this that one must look on the other questions that are raised: whether the ballot election is appropriate to the character of the office, and whether it is a thoroughly dependable way of choosing the right man. There is some feeling that the presidency should be regarded, not as a political office, but as an honor conferred by the Association without public competition, in recognition of the candidate's contributions to scholarship, public service or teaching; and also that in a given case the man who most deserves this honor may not necessarily be the one who can command the largest number of votes in a close competitive election. Some kinds of contributions of high merit are of a sort less well known to the membership at large than others, and are less likely to be found on the winning side in a ballot contest. I should not be inclined to stress this point in itself; but in connection with the disinclination to run a second time it seems to carry more weight. Choice by the members' ballots may be no more and no less fallible than a more private choice by a smaller body; but whatever fallibility it has is a more serious matter in proportion as the result (in the case of the defeated candidate) seems to be so permanent.

These considerations seem to carry weight. So also do the considerations that were responsible for the setting-up of the present election method, six years ago. I can testify personally that it is hard to say which kind of responsibility is more calculated to give pause to a member of a Nominating Committee: choosing officers outright, or nominating a list of good men, half of whom are certain to be defeated. The case is by no means one-sided.

As to the basic ends in view, we are probably fairly well of one mind. I think nearly every one would agree that in the selection of our Presidents two considerations should be paramount. First, election to the office should be a recognition of achievement. In any substantial period, the list of our Presidents should be the list of those of our members who have been outstanding in that period. Second, the determination of what constitutes outstanding achievement, and of who has attained thereto, should be made in a manner that gives reasonable representation to the geographic, doctrinal and technical differences within the membership of the Association. The question at issue is not so much these objectives as how best to attain them and to reconcile them.

As to the second objective, it is not clear beyond question that a change from the balloting system would sacrifice it. At present much still depends on the small, appointive Nominating Committee; and a broader and more representative nominating machinery might do as much toward making the choice representative as does the actual choice by ballot, within the limits of the Committee's nominations.

With this in view, an alternative procedure has been tentatively suggested by some of our members. It is as follows. First, the Vice-Presidents and the elected members of the Executive Committee would be elected as they are now. Second, a *single* candidate for President would be proposed, but would be selected by a substantially larger group. Here two alternative suggestions have been made. (1) This larger group might consist of the current Nominating Committee plus the current officers and other members of the Executive Committee, a group of 18 or 19. Within this aggregate, the Nominating Committee might retain the sole right to originate nominations, while the group voting as a whole

would select the candidate to be placed before the Association, and might also have the right to ask for additional nominations. (2) The larger group might consist only of the current elected officers and other elected members of the Executive Committee, including the three preceding Presidents (who are members of the Executive Committee *ex officio*). Under either alternative, the selecting group would in effect be a sort of electoral college. Its members would, of course, be debarred from nomination to the presidency in the current year. Third, the name of the single candidate thus finally chosen would be submitted to the Association, with the write-in privilege; but nomination would usually be tantamount to election.

It is argued that a selecting group of the size proposed (nearly half of it elected directly by the membership of the Association under the first alternative above, and two-thirds of it under the second alternative) would be at once large enough and sufficiently varied in composition to be more representative than the small Nominating Committee, as well as providing better guarantees than now exist against the self-perpetuating domination of any one group, and would hence be more "democratic"; it would also be large enough to assure the application of adequate standards of achievement in the selection of the candidate.

An added feature which has occurred to me might be to include a space in the ballot in which members would be expected to write in advisory presidential nominations, not for the current election but for the guidance of the next succeeding nominating body. This might be done, whether the other proposed change is adopted or not. Such advisory votes would naturally be scattered, but might afford a valuable test of the strength of various potential candidates.

I do not wish to take sides at present, either for or against the suggested change, though I do feel the drawbacks of the present method rather strongly. The problem seems important enough to deserve active discussion, which might find part of its expression in the columns of this *Review*. Possibly some better proposal might emerge. If any large number feel that a change is desirable, the question may well be brought up more formally, at or before the next annual meeting of the Association.

J. M. CLARK

Columbia University

Annual Meeting of the American Economic Association

The Fifty-third Annual Meeting of the American Economic Association will be held in New Orleans, with headquarters at the Roosevelt Hotel, beginning on the morning of Friday, December 27, and extending through Monday, December 30, 1940. The formal program will include a related series of meetings on certain of the persistent economic problems faced in this country. Sessions will be devoted to the federal budget and deficit financing, the price level and the gold problem, the present rôle of private investment, unemployment, the status of agriculture, and the international economic relations of the United States. Members scheduled to participate in these sessions will hold a preliminary two-day meeting in New York in September, for the discussion of preliminary drafts of the papers to be presented at New Orleans. This advance meeting is made possible by a special grant of the Social Science Research Council.

Other sessions at the December meeting will deal with the economic consequences of the war to the United States, problems of economic regionalism (with special reference to electric power and freight rates) and economic research. One session will commemorate the semi-centennial of the publication of Alfred Marshall's *Principles.*

The plans for the New Orleans meeting provide special opportunities for social activities, and for friendly and unhurried intercourse among members. Special trains from the eastern seaboard and the Chicago area (and probably from the Pacific Coast) will enable members to meet under pleasant conditions en route. The program includes an afternoon tea and a smoker. Free time has been left on Saturday evening and Sunday for visiting and sight-seeing in New Orleans and the surrounding country. It is hoped that these arrangements, and the opportunity to combine a winter vacation in the South with attendance at the formal sessions, will stimulate many members to bring their wives and families to the New Orleans meeting.

The program as a whole will be sponsored by the American Economic Association and the Southern Economic Association. Joint meetings will be held with the Econometric Society and the American Farm Economic Association.

Transportation arrangements are in charge of a committee consisting of James W. Bell, Morris A. Copeland, Robert W. Elsasser, Bernard F. Haley, Calvin B. Hoover, Edward S. Mason, George W. Stocking and C. Reinold Noyes, chairman.

Robert W. Elsasser, of Tulane University, New Orleans, is chairman of the Committee on Local Arrangements, and Dr. Elizabeth B. Schumpeter is chairman of a Hospitality Committee. The members of the committee in charge of the general program include James W. Angell, James W. Bell, Frank W. Fetter, Paul T. Homan, Calvin B. Hoover, C. Reinold Noyes, Elizabeth B. Schumpeter and Frederick C. Mills, chairman.

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The federal Department of Commerce has announced its coöperation with the National Resources Planning Board in a study of research by business. An advisory committee for the study has been appointed by the Social Science Research Council, as follows: Edwin G. Nourse, chairman; Howard Coonley, chairman of the board of Walworth Company; R. R. Daupree, president of Proctor and Gamble Company; M. B. Folsom, treasurer of Eastman Kodak Company; Clarence Francis, president of General Foods Corporation; Morris E. Leeds, president of Leeds and Northrup Company; R. Douglas Stuart, vice-president of Quaker Oats Company; Walter C. Teagle, chairman of the board of Standard Oil Company of New Jersey; Willard L. Thorp, economic adviser to Secretary of Commerce Hopkins and director of economic research of Dun and Bradstreet; Edwin B. Wilson, chairman of the Science Committee, National Resources Planning Board.

The study of research by business will run concurrently with a similar undertaking on research by industrial laboratories under the guidance of the National Academy of Sciences. The results of these two studies will constitute Part II and Part III, respectively, of the report by the Science Committee of the National Resources Planning Board on *Research—A National Resource.* John H. Cover, professor of statistics at the School of Business, University of Chicago, has obtained leave of absence to direct the study.

The Twentieth Century Fund announces the appointment of a committee to make a survey of housing needs as they present reëmployment opportunities. Miles L. Colean, formerly assistant administrator of the Federal Housing Administration will act as research director. Henry E. Hoagland, professor of business finance at Ohio State University, is chairman of the committee sponsoring the survey.

The oldest of the conferences sponsored by the Universities-National Bureau of Economic Research Committee—that on Price Research—held its fifth annual meeting April 19-20. F. C. Mills, now president of the American Economic Association, has guided the conference through its early stages to the publication of reports by four exploratory committees: on price research in the bituminous coal, steel, petroleum, and textile industries. Two standing committees are now functioning: that on Governmental Price Regulation, with Waldo E. Fisher as chairman; and that on Cost-Price Relations and Price Determination, with E. S. Mason as chairman. Professor Fisher is assisted by C. M. James; Professor Mason is assisted by J. T. Dunlop. A third standing committee—on Business Price Policies—is being set up under two chairmen: Donald Wallace of Williams College and M. G. de Chazeau of the University of Virginia.

E. S. Mason was elected chairman of the conference. The executive committee is composed of A. R. Burns, M. A. Copeland, F. C. Mills, E. G. Nourse, W. L. Thorp and T. O. Yntema.

The Social Science Research Council states that only eighty complete sets of *Social Science Abstracts* now remain in stock. It will not be feasible to continue distribution of any sets remaining on December 31, 1940, on the present basis. At that time all except a few of the unsold sets will be destroyed, and those saved will be reserved for possible library requests. Information may be obtained from Donald Young, Social Science Research Council, 230 Park Avenue, New York City.

The American Council on Public Affairs announces a new policy "to promote the spread of authoritative facts and significant opinions concerning contemporary social and economic problems" and for this purpose is prepared to sponsor, publish, promote and distribute scholarly books and studies in these fields. Further information may be obtained from the Council's headquarters, 1721 Eye Street, Washington, D.C.

The Department of State has received a request from the Foreign Office of Ecuador to announce the desire of a group of university students in Quito to hear lectures by foreign economists. While the students have no fund to pay for travel to and from Quito, they are ready to cover the expenses of lecturers during their stay in Quito. This announcement may be of interest to economists who are planning trips to South America. For further information write to Mr. Ben M. Cherrington, chief of the Division of Cultural Relations, Department of State, Washington.

A program to stimulate studies in the field of international relations has been undertaken by the American Committee for International Studies. Members of the Committee are: Edward Mead Earle, Institute for Advanced Study at Princeton, chairman; William W. Lockwood, formerly of the American Council of the Institute of Pacific Relations, secretary; J. B. Condliffe, Frederick V. Field, Alvin H. Hansen, Calvin B. Hoover, Philip C. Jessup, Chester Lloyd Jones, Frank R. McCoy, C. F. Remer, Whitney H. Shepardson, James T. Shotwell, Jacob Viner, and Henry M. Wriston. The Committee will welcome information and inquiries, which should be addressed to Edward M. Earle, American Committee for International Studies, Princeton, New Jersey.

The Bureau of Employment Security, Social Security Board announces the publication of *The Benefit Series*. This will contain a monthly compilation of significant decisions on appealed benefit claims under state unemployment compensation laws. Orders should be sent to the Superintendent of Documents, Government Printing Office, Washington. Volumes 1 and 2, $3.00; General Supplement No. 1, *Benefit Decisions of the British Umpire: A Codification and Text of Selected Decisions,* $1.00.

The National Federation of Business and Professional Women's Clubs is engaged in a research study relating to the position of married women in the economic world. For further information address National Federation of Business and Professional Women's Clubs, 1819 Broadway, New York City.

The fourth Pacific Northwest Conference on Banking was held at the State College of Washington, Pullman, on April 4-6. Among the papers presented were "The Effect of the War on Credit" by Walter Lichtenstein, "Revenue Bonds as an Investment" by J. E. Muckley, "The Industrial Future of the Pacific Northwest" by Ivan Bloch, and "A Loan and Investment Program for the Present" by G. Sydney Houston. The proceedings will be published.

The Mid-West Economic Association held its seventh annual meeting at Des Moines, Iowa, April 18-20, attended by 250 members. The following officers were elected for the ensuing year: president, J. E. Kirshman, University of Nebraska; first vice-president, J. S. Robinson, Carleton College; second vice-president, H. L. Jome, DePauw University; secretary-treasurer, C. W. Thompson, University of Iowa.

The twenty-second annual meeting of the American Association of Collegiate Schools of Business was held at the University of Texas, April 18-20. The following officers were elected: president, J. Hugh Jackson, Stanford University; vice-president, Charles C. Fichtner, University of Arkansas; secretary-treasurer, Herluf V. Olson, Dartmouth College.

The Mississippi Valley Historical Association held its meeting at Omaha, May 2-4. Among the papers presented were "Economic Development of the Black Hills Region" by C. G. Beckwith, University of South Dakota; "The Passing of the Small Oil Man" by Gerald Forbes, Northeastern Oklahoma State College; "The Development of the Range Cattle Industry" by Ora B. Peake, Colorado State College of Education; "Grangerism—A Product of the Frontier or of the Agricultural Revolution?" by Benton H. Wilcox, Wisconsin Historical Records Survey.

The tenth Stevens Conference of Business and Engineering Administrators will be held at Johnsonburg, New Jersey, June 22-30. For further information address Arthur E. Blirer, assistant to the president, Stevens Institute of Technology, Hoboken, New Jersey.

The Citizens' Conference on Government Management will be held at Estes Park, Colorado, June 17-22. Among the subjects to be discussed are "Conserving the Credit of Our Local Governments," "Balancing the State and Local Tax Structure," "The Administration of Public Relief," and "How Shall Business Be Taxed?" For further information address the School of Commerce, Accounts, and Finance, University of Denver.

The sixth annual Business Education Conference of the University of Denver will be held June 26-27. The general theme will be "Utilizing Community Resources in the Teaching of Business Education." A detailed program may be obtained by addressing the director of the Summer Quarter, School of Commerce, University of Denver, Denver, Colorado.

"Business Education for What?" is the general theme of the seventh annual University of Chicago conference on business education, to be held in the University's School of Business, June 27-28. For further information address Carl F. Huth, director of the Summer Quarter.

The sixteenth institute under the Norman Wait Harris Memorial Foundation in International Relations will be held at the University of Chicago June 25-July 3. The subject of the institute will be "The Foundations of a More Stable World Order."

The Cowles Commission sixth annual Research Conference on Economics and Statistics will be held at Colorado College, Colorado Springs, July 1-26. For details address the Cowles Commission, University of Chicago, Chicago, Illinois.

The Summer Institute for Social Progress at Wellesley will be held July 6-20 at Wellesley College, Wellesley, Massachusetts. The theme is to be "Building Democracy." Peter H. Odegard, professor of politics at Amherst College is faculty head; and Henry E. Warren, president of Warren Telechron Company is the elected head of the Institute. A program may be obtained from Dorothy P. Hill, director, Wellesley, Massachusetts.

The American Advisory Economic Mission to Venezuela has completed its assignment in that country and returned to the United States. The personnel of the Mission was: A. Manuel Fox, United States Tariff Commission, chairman; James H. Edwards, adviser in customs administration and fiscal matters; Martin Krost, Federal Reserve Board; Harold R. Spiegel, United States Treasury Department; Harold V. V. Fay, United States Tariff Commission.

The National Bureau of Economic Research released in January the first of the studies prepared under the direction of the Advisory Conference on Research in Finance entitled *Personal Finance Companies and Their Credit Practices.* Four more studies are in press: *Commercial Banks as Agencies of Consumer Instalment Credit; Sales Finance Companies and Their Credit Practices; Government Agencies of Consumer Instalment Credit; The Pattern of Consumer Debt, 1935-36.*

Semi-Fixed and Permanent Capital for Small Business is a 40-page mimeographed study by the Lincoln and Therese Filene Foundation, Inc., 426 Washington Street, Boston, copies available at 20 cents. The report draws two conclusions: (1) That small business is unable to secure permanent capital on terms comparable to those on which larger business units secure capital; (2) That the weight of evidence and opinion indicates a real need for long-term loans for small business, for working capital, the purchase of equipment, etc., for terms of five, ten or even fifteen years.

A study made for the National Orchestral Survey under a grant of the Carnegie Corporation is entitled *America's Symphony Orchestras and Who Supports Them,* by Margaret Grant and Herman S. Hettinger (New York, Norton, 1940). It deals with economic problems of symphony orchestras and what can be done to increase their economic stability.

John Atkinson Hobson died in London on April 1.

Lincoln Hutchinson, former professor of economics at the University of California, died at San Francisco, May 22.

Olin Ingraham, assistant professor of economics at the Massachusetts Institute of Technology, died May 10.

Appointments and Resignations

Charles C. Abbott has been promoted to the position of associate professor of business economics at Harvard University.

Wendell M. Adamson has been relieved of his teaching and his duties as statistician for the bureau of business research at the University of Alabama School of Commerce and Business Administration and assigned to a special study of "Commodity Production in the Southeast," sponsored by the bureau.

Willard D. Arant has accepted a position as research director of the National Economy League in New York.

John C. Baker has been promoted to the position of professor of business administration at Harvard University.

Warren Baker is instructor in economics at the University of Alabama School of Commerce and Business Administration.

E. Wight Bakke has been made director of graduate study in the economics department at Yale University.

Grace Beckett is associate professor of economics at Indiana Central College.

T. N. Beckman of Ohio State University will teach courses in marketing during the summer session at the University of Colorado.

Daniel Borth, auditor of Louisiana State University and associate professor of accounting was reëlected secretary-treasurer of the Southwestern Social Science Association.

W. Baldwin Buchanan, instructor in accounting at Georgetown University and practising certified public accountant, will offer courses in the department of accounting in the 1940 summer session of the Catholic University of America.

Louis F. Buckley, acting head of the department of economics and associate professor of economics at Notre Dame University, will teach in the 1940 summer session of the Catholic University of America.

Eveline M. Burns in December, 1939, was appointed director of research on the Committee on Long Range Work and Relief Policies which the National Resources Planning Board is now undertaking at the request of the President. Columbia University has relieved Dr. Burns of her academic duties during the year 1940-41 in order to enable her to carry out this assignment.

Persia Campbell of Columbia University will be instructor in economics at Queens College, Flushing, New York.

N. H. Comish, professor of business administration at the University of Oregon, is offering courses in the 1940 summer session of the University of Utah.

John F. Cronin, professor of economics at St. Mary's Seminary will teach two courses in Catholic economic thought at the 1940 summer session of the Catholic University of America.

Elizabeth Curtiss has been appointed lecturer in economics at Wellesley College.

Edward F. Denison, Jr., has been appointed part-time instructor of economics at Brown University for the academic year 1940-41.

T. N. Farris, professor of economics at Louisiana State University, was elected chairman of the economics section of the Southwestern Social Science Association.

Raymond F. Farwell has been promoted to professor of transportation at the University of Washington College of Economics and Business.

Wirth W. Ferger has resigned as associate economic adviser to the Secretary of Agriculture to accept the position of assistant director of the Division of Economics, Insurance, Warehousing and Transportation of the Commodity Credit Corporation.

Franklin E. Folts has been promoted to professor of industrial management at Harvard University.

Arthur D. Gayer has resigned his position at Barnard College in order to take an associate professorship at Queens College, Flushing, New York.

James E. Gillis, instructor in accounting at Columbus University and practising certified public accountant, will offer courses in the department of accounting at the 1940 summer session of the Catholic University of America.

Frank D. Graham, professor of economics at Princeton University, will teach during the summer session at Northwestern University.

John A. Guthrie has accepted a position as assistant professor at the State College of Washington.

Frederick H. Harbison of Princeton University has been appointed instructor in economics at the University of Chicago.

E. J. Hawk of Birmingham-Southern College will teach during the summer session at the University of Virginia.

Kent Tenny Healy has been advanced to the rank of associate professor in the department of economics at Yale University.

W. Lawrence Hebbard will pursue a research project in Washington during 1940-41 as a holder of a Michigan-Brookings coöperative fellowship.

Thomas M. Hill, instructor in economics at Yale University has been awarded a Royal Victor Fellowship at Leland Stanford University for the year 1940-41.

Edgar M. Hoover, Jr., University of Michigan, has served as consultant with the St. Lawrence Waterway Survey in the Department of Commerce.

Stanley E. Howard, Princeton University, has been promoted from associate professor to professor.

Lowell F. Huelster of the American University has accepted a position as acting chairman of the department of business administration and associate professor of business administration at the Central Y.M.C.A. College, Chicago.

Warren S. Hunsberger has been appointed assistant professor of economics at the University of New Hampshire.

Pearson Hunt has been promoted to an assistant professorship in the department of economics at Yale University.

John G. B. Hutchins has accepted a position at Cornell University for next year. Dr. Hutchins, who has been an instructor in economics at Rutgers University, has been awarded the David A. Wells prize of $500 for outstanding original research in economics by Harvard students or recent graduates.

F. Cyril James of the University of Pennsylvania has been appointed principal and vice-chancellor of McGill University.

Stuart Jamieson of the University of California has been serving as instructor in economics at Oberlin College for the second semester of the present year.

Russell E. Johnson, instructor in economics at the University of Alabama School of Commerce and Business Administration, has been relieved of most of his teaching in order to serve as acting statistician for the bureau of business research while Wendell M. Adamson is on leave.

Michael Jucius of Ohio State University will offer courses in industrial management during the summer session of the University of Chicago.

Clark Kerr, acting assistant professor at Stanford University, has been appointed assistant professor in labor in the College of Economics and Business at the University of Washington.

Lowell Kirkpatrick has been appointed part-time instructor of economics at Brown University for the academic year 1940-41.

Simeon E. Leland is chairman of the department of economics at the University of Chicago. He has resigned his chairmanship of the Illinois State Tax Commission.

A. P. Lerner has been appointed acting associate professor of commerce at the University of Virginia during the spring term.

Richard A. Lester of the University of Washington will serve as director of a survey on industrial relations in the Pacific Northwest for the Northwest Regional Council during the spring and summer months.

Ben W. Lewis of Oberlin College has been on leave of absence for the second semester of the present year, serving as chief of the economic section of the Consumer's Council Division, Department of the Interior, stationed in Washington.

John A. Loftus of Johns Hopkins University has been appointed assistant professor of economics at Holy Cross College.

Arthur N. Lorig of the College of Economics and Business at the University of Washington is serving as consultant in accounting for the Municipal League of Seattle in connection with his university duties.

Arthur F. Lucas of Clark University has been visiting professor of economics at Wellesley College during the second semester of the present year.

A. M. McIsaac, associate professor of economics at Princeton University, has been granted a leave of absence for the second term of 1940-41.

Fritz Machlup of the University of Buffalo will teach during the summer quarter at Stanford University.

C. Ward Macy of Coe College will teach at the University of Washington summer school.

Alfred Manes has been lecturing in Puerto Rico during his leave of absence from Indiana University, and has also been invited to lecture in Spanish at the University of Havana, Cuba, in the department of social and political science and the School of Commerce.

Donald Marsh has accepted a position at Barnard College as instructor of economics.

Boyce Ficklen Martin, assistant dean at Harvard Graduate School of Business Administration, has been elected dean of the School of Business Administration at Emory University.

John Perry Miller, who has been a visiting lecturer at Yale University during the present academic year, has been appointed assistant professor in the Yale department of economics.

Elizabeth Morrissy, professor of economics at Notre Dame of Maryland College and the National Catholic School of Social Service, will teach in the department of economics at the 1940 summer session of the Catholic University of America.

Vernon A. Mund has been granted a leave from the University of Washington for the autumn and winter quarters of 1940-41 to engage in research on industrial prices under a fellowship of the Social Science Research Council.

Richard A. Musgrave has been appointed instructor and tutor in economics at Harvard University.

William A. Paton, professor of economics and accounting at the University of Michigan, gave the Dickinson Lectures on April 11 and 12 at the Graduate School of Business Administration of Harvard University.

Elmore Petersen, dean of the School of Business of the University of Colorado, will offer courses in industrial management during the first summer session of Ohio State University.

Wilbur K. Pierpont, University of Michigan, will pursue a research project in Washington during 1940-41 as a holder of a Michigan-Brookings coöperative fellowship.

Raymond J. Saulnier will succeed Professor Arthur Gayer as assistant professor of economics at Barnard College, joining the staff in the autumn of 1940.

Edmond T. Sergott is now instructor of economics at the Catholic University of America.

Charles S. Sheldon, 2nd, is to be instructor in transportation at the University of Washington.

Dan T. Smith has been promoted to the rank of associate professor of finance and taxation at Harvard University.

George A. Smith, Jr., has been promoted to the rank of associate professor of business at Harvard University.

James G. Smith, professor of economics at Princeton University, will be on leave of absence during the first term of 1940-1941.

Lawrence Smith is to be chairman of the economics department at Wellesley College.

S. D. Southworth of the department of economics of the College of William and Mary has become a member of the American Economists Council for the study of branch banking.

Edward D. W. Spingarn has accepted a position as instructor at Trinity College in Hartford.

James M. Stepp has received an appointment to the faculty at Clemson College.

Lorie Tarshis of Tufts College has been granted a year's leave of absence to work with the National Bureau of Economic Research.

Albion G. Taylor, assistant dean of the College of William and Mary, will offer courses at the summer session of the University of Oregon.

W. G. Thornborough, assistant professor of business administration at The Citadel, was granted a leave of absence for the year 1939-40.

Mary Van Brant will be a department assistant at Barnard College next year.

Jacob Viner has been appointed to the Morton D. Hull Distinguished Service Professorship at the University of Chicago.

Willard Waller has been acting head of the department of economics and sociology at Barnard College during the sabbatical leave of Professor Baker.

George S. Wehrwein of the University of Wisconsin is to give a course in land economics at the University of Chicago this summer.

William G. Welk has resigned his post of professor of economics at the College of St. Thomas, to accept the position of senior commercial policy analyst with the United States Tariff Commission.

John P. Wernette has been promoted to the rank of associate professor of business economics at Harvard University.

William Withers has been promoted from the rank of assistant professor of economics to that of associate professor of economics and chairman of the department of economics at Queens College, Flushing, New York.

Paul H. Wueller has returned to his duties at Pennsylvania State College. He will remain with the Bureau of Research and Statistics of the Social Security Board at Washington, as principal consulting economist.

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FUNDAMENTAL DEFICIENCIES OF THE AMERICAN PATENT LAW

The patent law is basic to the patent system. By analyzing the former we may explain the weaknesses of the latter.

The law makes certain rather obvious "economic" assumptions which are inapplicable to the modern economy. But the most important—and most fallacious—assumption is its individualistic conception of the process of invention. In fact, invention is a group process, the individual contributions being relatively minor. In modern industrial research this is particularly so.

A grant of separate proprietary rights over each inventive contribution thus imposes barriers to further innovation and reduction to practice of the whole. The economic system has had to remove these barriers. But this has involved the creation of large patent pools, with consequent dangers of injustice, and monopoly.

In addition, the confusion entailed by the application of the single patent to modern technology has offered to the powerful legal methods of unfair competition. The result is often injustice, perpetual legal monopoly over whole industries, and the danger, at least, of technological retardation.

The patent law is not the same thing as the patent system. Our legal method of fostering technological advance is an ancient structure, almost the same, basically and in detail, as it was three hundred years ago. But the economic institutions which have grown up around this venerable legal framework have so radically changed that it is difficult to believe that the same law could possibly apply in the manner originally intended to the new situation. In fact it does not. Economic change, motivated by the dynamic quest for profit, can use law, modify it, or ignore it. The resultant system may be more or less socially beneficent, more or less effective in accomplishing its original purpose; in any event it will be different from that originally contemplated by the unchanged legal prescriptions.

This paper does not attempt thoroughly to describe or evaluate the operation of the patent *system*. Its major interest is rather in the theory of the patent *law*. Law is society's means of conscious control. Because it is basic in the sense that economic institutions must develop within or about it, we must understand the law before we can understand and evaluate the economic adaptations and the resultant synthesis. Insight into the problems of our present patent system may therefore be gained through analysis and evaluation of the preconceptions and rationale of the patent law, particularly in the light of the major economic changes which have occurred since its conception.

The patent law is a method, a means to a socially desired end. To encourage invention, the State grants to the inventor a monopoly right to manufacture, use, and sell his creation. A strange choice of means, it would seem, for a competitive, laissez-faire society. The legal and theoretical basis for the patent method was established by the seventeenth century British Courts and Parliament, in the midst of their successful struggle *against* monopolies, *against* the indiscriminate grants of letters patent by impecunious monarchs. These men invalidated and then forbade such grants on the grounds that they suppressed that freedom of trade which was "the birthright of every subject." Nevertheless in each case they made this specific exception:

> If a man hath brought in a new Invention and a new Trade within the Kingdom . . . or if a man hath made a new Discovery of anything, In such Cases the King . . . in recompense of his costs and travail, may grant . . . that he only shall use such a Trade or Traffic for a certain time. . . .[1]

They must have thought it quite possible to reconcile laissez faire and the natural rights of free trade on the one hand, and the limited monopoly of the patent law on the other.

Property—the right to the product of one's labor—is the first natural right. The shoemaker has an absolute natural right to the shoe he has made; he can do with it as he wills. The inventor, by his wit and initiative, creates or brings into the realm a new product or process; he too is entitled to his creation. However, the shoemaker's perpetual monopoly over his shoe does not deprive other men of a similar right to make shoes; whereas the perpetual monopoly of a trade or idea does so deprive others and is thus inconsistent with the natural rights of free trade. How shall the State reconcile the natural right of the one with the natural right of the many? The Crown enters into a free contract with the innovator, rewarding him for his invention and his disclosure with a fourteen-year exclusive property right to the idea.

This contract, one of the few encroachments upon natural law permitted the sovereign authority, merely secures that natural law. By limiting the monopoly to a period long enough for training two sets of apprentices (seven years to each set), the Crown prevents the inventor's monopoly from being any more restrictive than the shoemaker's. How can there be deprivation of the natural right of others to enter a trade when that trade has not previously existed,[2] when, once the trade becomes common, the new

[1] Case of The Clothworkers of Ipswich, Godbolt 254 (Kings Bench 1615). *Vide* also the Statute of Monopolies 21 Jac. 1, ch. 3, sec. vi.

[2] Such a monopoly, it was reasoned, was not a monopoly at all. *Vide* Blackstone's definition of monopoly: "A license or privilege allowed by the King, for the sole buying and selling, making, working, or using of anything . . . ; whereby the subject in general is restrained from that liberty of manufacturing or trading *which he had before*." (Italics mine.) See *Walker on Patents*, Deller's ed., vol. i, p. 9.

field is thrown open to all?[3] No one loses: society immediately gains a new product, eventually gains a new trade.

A basic justification for the system of free contract and private property is that under such a system the individual will be rewarded in direct proportion to what he contributes by his own labor. The good of society and the good of the laborer coincide precisely: the more the laborer produces, the more he gives to society by sale, the more he will earn. So it is with the inventor once the patent has given him property in his idea. He may sell the idea, or he may "work" it and sell the product; in any case the market will evaluate his contribution and remunerate him accordingly.[4]

Application of this simple scheme to complex reality demands considerable judgment and meticulous administration. In the case of each patent application, the State must decide whether to enter into the contract at all and, if so, precisely how broad a property right to confirm. Minimum standards of patentability—as to novelty and usefulness—are necessary to protect the free channels of normal trade against unwarranted monopolistic encroachments by men who contribute nothing really original or important. In the interests of justice and of encouragement to inventors, the State must see that the true inventor and none other is rewarded. And once the property right is granted and validated, the State must enforce it. These are the problems of successful administration of the law.

For purposes of discussion, this theoretical rationale of the patent law and the assumptions underlying it may be broken into two major aspects—the one strictly "economic," the other technological.

In its strictly economic aspects, the rationale of the patent law is, fundamentally, the rationale of the entire economic system of which it is a consistent part. It shares with the broader economic theory these basic features and assumptions:

(1) Every person is conceived to be a self-sufficient bargaining unit. The laborer is both laborer and business-man, the technician both technician and pecuniary negotiator. The patent illustrates this most clearly. A patent is essentially a reward for a business-man. The prospective monopoly

[3] Thus, in the historic cases, duration of the legal monopoly is restricted to that period during which the innovation is unfamiliar: "because at first the people of the Kingdom are ignorant, and have not the knowledge or skill to use it: But when that Patent is expired, the King cannot make a new Grant thereof: For . . . the trade is become common. . . ." Clothworkers of Ipswich case, *loc. cit.*

[4] "Could any system be more plainly founded on substantial justice, both to the inventor who creates and sells, and the public that buys and uses? . . . The inventor simply sells to the world what it never possessed before, and the public pays him. . . . The world will not buy unless it can find its own profit in buying and thus the patentee cannot profit unless the world be a gainer also." James Whitney, "The Relation of the Patent Laws to American Agriculture, Arts and Industries," reprint of speech before New York Society of Practical Engineering, New York, 1875 (by the Society).

over a trade, the exclusive right to start a business free of competition, is obviously a pecuniary expedient. The assumption must be that the inventor is also a business-man capable of exploiting his opportunity, leaving to society alone the appraisal of his efforts by the appraisal of his products. This is a throwback to the era of handicraft, when to be an artisan was to be at once worker, technician, bargainer. It mirrors even more clearly the fact that in those days, to a large extent, technological progress meant the introduction of new processes and new products from abroad. To the growing enterprising merchant class which was responsible for this type of innovation, a monopoly in any trade they might so introduce was an incentive they could well appreciate.

Applied to invention as we know it today, however, it means that if an inventor is to exploit his opportunity fully, he must combine the talents of technician, craftsman, promoter, financier, and business manager. True, the patent law permits him to dispose of his property as he sees fit. He may assign his invention, or he may license others to use it, or he may "work" it himself. Thus does the free contract of sale or license accomplish the modern division of function. But whereas the shoemaker will presumably sell to a freely competitive open market, the inventor, if he cannot himself utilize his invention, may find himself the weaker bargainer facing the one or more well entrenched concerns who are the only market for his patent. The patent law neither comprehends nor controls this often unequal bargain.

(2) The second assumption follows naturally: that there will be equality of bargaining power and freedom in competition beyond those limits created by the patent grant itself. The patentee, it is assumed, will find little difficulty in putting his invention into practice if it is worthy. He will be unimpeded either by monopolistic restriction or by lack of capital.

(3) Finally, the patent law postulates a materialistic psychology, accepts the profit motive as stimulus enough to bring forth all socially desirable inventions, and postulates personal aggrandizement as the major incentive to the individual inventor. In all this it merely mirrors the broader economic theory and actuality of which it is a part.

But the basic assumption behind the patent law is not economic, but technological. In order to look upon a single inventive contribution as patentable and exploitable, one must look upon each invention as an entity, self-contained and distinct from all others. Then it will follow that valid patents, if granted to the real inventors, can never conflict or overlap. Single real inventions are distinguishable, patentable, usable—so goes the assumption. The progress of science and the arts is, therefore, conceived to be a series of fortuitous self-contained innovations (steamship, steam en-

gine, locomotive) which are the single-handed contributions of geniuses (Fulton, Watt, Stephenson). If the patentee had not made this particular synthesis, no one else would have made it, and society loses nothing when it grants the patentee his monopoly. Invention is, in short, not an organic co-operative process, a type of societal evolution, but rather an unpredictable patchwork of random formulations.

And yet the interpretation of all social institutions as the end-results of an impersonal evolutionary process marked by gradual accretion and gradual change has become part of the common sense of modern social science. Social change, of which technological progress is one type, is conceived of as a group process, the unfolding of an "organism" which contains within itself the dynamic factors that make for constant cumulative movement. Each novel element arises inevitably from the past and itself sets up a complex interplay of causes and effects which in turn induce still further change.[5] These novel elements are what we call inventions. They are, of course, created by individuals; but these individuals merely make explicit what was already implicit in the technological organism which conditions their thought and effort and within which they must work. Strictly speaking, no individual makes an invention, in the usual connotation of the term. For the object which, for linguistic convenience, we call an automobile, a telephone, as if it were an entity, is, as a matter of fact, the aggregate of an almost infinite number of individual units of invention, each of them the contribution of a separate person. It is little short of absurdity to call any one of the interrelated units *the* invention, and its "creator" *the* inventor. The man who brought to a certain stage of fruition the efforts of myriad predecessors and who laid the groundwork for the efforts of myriad successors, and whom therefore we call the inventor, may have made a great contribution. But seen in its proper setting and perspective, that contribution is something less than cataclysmic.

If this is true, did Watt "invent" the steam engine? What rôle then was played by such precipitating factors as the growth of cities, or the need for minerals (both demanding superior pumps, the one for water supply, the other to keep the mines from flooding)? And what of broader forces such as the expansion of commerce and industry, the great discoveries, the Renaissance? And the basic explorations in air pressure, and the less and less crude engines, of a line of great scientists and inventors from Galileo to Newcomen? Watt was repairing the latter's engine when he conceived his own crucial contribution. And what of the progress since, in metallurgy, permitting greater pressures, in lubrication, permitting higher

[5] *Vide, e.g.*, R. M. McIver, *Society, Its Structure and Changes*, New York, 1931, pp. 402, 431; W. F. Ogburn, *Social Change*, New York, 1922, p. 342; T. B. Veblen, *The Instinct of Workmanship*, p. 103.

temperatures, indeed in virtually all related fields of pure and applied science which have contributed, directly or indirectly, to that organic process which we call "steam engine"?[6]

Invention, or any particular invention, is then a social growth and adheres to certain fairly definite patterns of impersonal causation.[7] To say that no single inventor is indispensable—is it not to say that inventions are inevitable? In Ogburn's *Social Change*[8] there appears a list of 148 basic or significant inventions and discoveries made independently and almost simultaneously by two or more persons. Ogburn suggests that the list is indefinitely extensible. The vast range of discoveries on the list is startling, but any good history of invention will confirm the conclusion.

> We cannot find a single example . . . but if there were some desired discovery so difficult, so recondite that only five men . . . had the intellect and the preoccupations which would lead them to it—not one of those geniuses would be necessary . . . since any of the remaining four would find it instead.[9]

The same technology, the same defects and problems, will yield the same solutions when those problems are attacked by men trained in the same prior art and working in a common social and physical environment.[10]

This is not to deny either the existence of inventive genius or the importance of the gifted individuals through whom the social forces are made effective and useful. Even independent alternative inventions often occur years apart, and are seldom of equal merit. But even the greatest men are subservient to the social process. Leonardo's most amazing accomplishments, clearly set down in his notebooks, were brilliantly conceived, but impossible to execute. His airplane awaited a science of aerodynamics, his textile machinery less limited forms of motive power, and broader markets. No one man can create a whole technology and science with which to

[6] A. P. Usher, *A History of Mechanical Inventions*, pp. 25-6, 298 *ff*.

[7] Usher, *op. cit.*, pp. 23-4. Social necessity is such a cause, though not of course sufficient of itself to insure invention. The steam engine's need for better lubricants and tougher metals must have hastened their advent. So, too, the consecutive needs for faster weaving, spinning, preparation of raw cotton, then weaving again, does much to account for the successive textile inventions of Kay, Hargreaves, Arkwright, Crompton, Whitney, and Cartwright. Institutional changes at one point indubitably create the need for and thereby help "cause" other adjustments, inventions, if necessary.

[8] Pp. 90-102.

[9] S. C. Gilfallen, *The Sociology of Invention*, p. 74. This thesis that no inventor is indispensable, that any invention is inevitable, is reinforced by the existence of equivalent invention, simultaneous discoveries of variant means for attaining the same end once need for that end has become apparent; by the phenomenon of independent re-invention, when the time was ripe, of an earlier invention which had languished for want of a market or of a sufficiently developed technology; by the constant *bona fide* interference proceedings in the patent office.

[10] The suggestion that inventions are inevitable does not mean that therefore all inventions are predictable. To some extent they are. To the extent they are not, it means, not that inventions are fortuitous, but only that the human mind cannot comprehend all the dynamic factors in the present situation or the course of their future interplay.

clothe in reality the images of his creative imagination. The individual does not construct new chains; he fills in missing links. When in time the need was clear, the technology sufficiently developed, and the social milieu propitious, then textile machinery and the airplane came—they had to come.

The transformation of technology and of economic society during the last century negates completely the patent law assumption as to the nature of the inventive process. The systematic, planned experimentation which characterizes modern technological method, swifter and surer than the old, has enhanced the interdependent, coöperative nature of invention. Technology has become so vast and so complex that the individual is more than ever dwarfed in relation to it. Invention has in addition become much more consciously coöperative. In the great modern research laboratories, tens, hundreds of men focus upon single, often minute, problems. With scientific organizations thus systematically mulling over all the known problems, inventions become increasingly inevitable. It becomes more than ever impossible to isolate any one contribution as the invention or any one man as sole inventor and rightful patentee.

This means, further, that invention today requires more than sound mechanical sense and a tool shop. It requires thorough specialized technical training and costly equipment. Barbers, ministers, art students (Arkwright, Cartwright, Fulton) can no longer be counted upon to give the world its great inventions. Nor is the garret any longer an adequate laboratory. Hence inventors are for the most part trained salaried professionals, hired to learn and to work in the great laboratories provided by those who can afford them. Patents are automatically assigned to the corporation which pays the salaries and provides the facilities. Because it takes the risks, the business takes the speculative reward. Because invention is consciously coöperative, the individual inventor cannot readily be isolated as the just patentee, so that all patents are held by the collectivity—the corporation. Because the process of invention is more than ever a complex process of minute accretion, the individual patent is seldom large enough to exploit by itself; therefore patents are pooled as a basis of exploitation by the firm which acquires them.

For the inventors in the laboratories, the modern incentive is probably preferable to the old. These men are specialists, professionals who like their work. Where society accords scientists and inventors steady income, respect, a career, and a laboratory, it is safe to assume that most prefer these emoluments, facilities and associations to the uncertainties of isolated research and business adventure.

The lone genius bent upon individual invention and personal exploitation will find it increasingly difficult in the future to compete with such laboratories and their sponsors. This does not mean that the "outsider" can forth-

with be relegated to oblivion. Despite the encouraging tendency of modern industrial laboratories to become scientific centers as well as mere improvement workshops,[11] it cannot be doubted that "insiders" do tend to be more conservative and to lose the broader view. Since most of their work is confined to specific problems posed by operating departments, chances for revolutionary discovery are limited. When private enterprise provides the means and compensation for research, those who pursue it will fix their attention on what business looks upon as practical tasks and practical results. We do not know whether the industrial laboratory will ever displace the "outsider" in the realm of "revolutionary" invention. The institutional laboratories have no monopoly on inventive talent; though the trend is toward their increasing dominance, the outsider is still to be encouraged.

The patent law seeks to reward the individual who reduces to practical workable form an improvement in the prior art. But is it not dangerous to give him a monopoly over "his" invention when it represents in such large measure the work of others who have come before him and which can be completed only by the work of others who come after? A single seventeen-year monopoly of a minor cog in that huge mechanism of interlocking processes and contributions which make up an advancing art can for seventeen years seriously retard continued research. All those who wish to put their innovations into practice must settle with the owner of the related patent. Can the sweep of modern technology withstand the restrictive force of a hundred patents covering a hundred minute individual efforts in that growing process we call a "product"? The proof that it cannot is that industry after industry has been checkmated by the patent law and has been forced to set aside the individual patent both as a basis for production and as a stimulus and reward for invention. To that extent, the patent system has been forced to depart from the patent law. The modern research laboratory is a leading feature of this partial abandonment.

So the growth of modern technology, typified by the modern research laboratory, has cast increasing doubt upon the fundamental assumptions of the patent law, and necessitated a new form of reward for invention and a new form of exploitation. The invention is less than ever distinct, patentable and individually exploitable; the inventor is less than ever a self-sufficient bargaining unit capable of exploiting a single patent monopoly. So, too, has the not unrelated growth of modern business organization and modern institutions of industrial control made the other assumptions

[11] *Vide* Maurice Holland and Henry Pringle, *Industrial Explorers*, New York, 1928; also testimony of William Coolidge, "Investigation of Concentration of Economic Power," Hearings before the Temporary National Economic Committee, 76 Cong., 1 Sess., Jan. 17, 1939, pt. 3, p. 913, and of Frank Jewett, *ibid.*, p. 961.

of the patent law less and less realistic. The inventor will seldom be able to "work" his monopoly, to engage in business and receive a just reward from the market. The welter of conflicting blocking patents, the resultant threats of infringement litigation (themselves the product of the patent law) make independent exploitation increasingly hard.

There remains the assumption, finally, that the profit motive is sufficient to bring forth all socially desirable invention—that if any invention is for the benefit of society it will certainly be of benefit to the individual to invent and use it. Society would gain if we could conserve our petroleum by ensuring 100 per cent recovery and could save all the natural gas in the process. But are the necessary research and slower, more expensive production methods likely to be undertaken in the highly competitive petroleum industry where speed of removal is more important than thoroughness? Longer-lived automobiles, we are told, are possible. But why should an automobile manufacturer, ensconced in an imperfect market, cut down that market by producing such cars? Indeed, he meets his competition mainly by making superficial changes of style and design in order to produce a car of shorter fashionable life rather than of greater physical durability. The Temporary National Economic Committee uncovered the possibility of a radio tube adaptable to home use, with considerably longer life than the ordinary tube, but not available to home radio owners. Even if it were not true, as others testified, that such tubes are impractical because they would long outlast the radios, why should a tube manufacturer who controls the output of the present type work on such a project?[12] A possible lapse of the profit motive is recognized in the field of "pure" science. But invention is supposedly a "practical" science, a "useful" art—and what is useful to society must presumably yield some return for production and distribution. Conversely, if something cannot earn a normal return it is presumably not socially useful. If that is good economics, only a poor definition of economics makes it so!

The patent law, as originally conceived, works less and less well in modern society. Complaints about the details of its operation and administration persist and multiply. It is our thesis that such abuses as are complained of arise from fundamental deficiencies in the law. We should like to list briefly some of the problems which constantly recur, casting doubt upon the efficacy of mere procedural reform while retaining the essentials.[13]

There are too many patents, too many worthless patents. There are

[12] "Investigation of the Concentration of Economic Power," part 3, pp. 954-55, 959-60, 964, 995-96, 1158-59.

[13] As we have indicated above, the following is not intended as a thorough or adequate description of the operation of the patent law or its abuses in modern society. A good general survey of this kind may be found in *Government and Economic Life,* by Lyon, Watkins and Abramson, Brookings Institution, 1939, vol. i, chap. 6.

too many vaguely drawn, excessively broad, uselessly narrow, wholly unworked patents. Too many impractical, too many un-original "inventions" are patented. The law, of course, seeks to prevent that. The invention must be new if it is to receive a patent grant. It must be more than what any person skilled in the trade could have thought of. It must be useful.[14]

But we have seen that any invention is only a new combination of already existing data, a novel synthesis of earlier elements, a re-formulation of the prior art. It may have taken positive genius to conceive of the invention, yet *ex post facto* it may look obvious to any skilled technician. As they pass upon applications and patents, the courts and patent office must be reminded daily of Columbus and the egg! As to the problem of usefulness, the difficulty of determining in the present what is or is not likely to be useful in the future has caused the patent office to abandon any attempt to apply the criterion of utility except in the rejection of inventions likely to be positively harmful.[15]

Each year the patent office receives 50,000 to 100,000 patent applications. It cannot afford adequate research into the prior art in order to evaluate novelty,[16] and it is afraid to judge of utility. Rather than risk injustice in a few cases it must be lenient in many, and must resolve doubts as to patentability in the applicant's favor. This means that the courts must make the final judgment of validity when and if the patent is adjudicated.[17]

Hence infringement litigation, lasting many years and costing many thousands of dollars, is necessary in order to test the validity of the disputed patent and to determine whether infringement has occurred. If both parties wish to, and can afford to, they may go through with the litigation until it ends either in a judicial decision or in exhaustion or bankruptcy of one of the parties. If the parties are unable or unwilling to go on, they will be forced to settle, or to forget the whole matter, thus rendering questions of justice quite irrelevant and making questions of relative strength and bargaining power the major determinants of the outcome. The patentee needs money to protect his rights—rights which, after years of litigation, he may find to be non-existent. No wonder he so often gives up the patent for little or nothing to others who can afford the luxury of owning it and enforcing it in the courts. A similar evil is the existence of thousands of costly, long-drawn interference proceedings within the patent office each

[14] U. S. Code, title 35, sec. 31.

[15] Lyon *et al., op. cit.,* pp. 127-28. *Vide* also testimony of Commissioner Coe, "Investigation of Concentration of Economic Power," part 3, p. 842.

[16] "Committee on Relation of the Patent System to the Stimulation of New Industries," Second Report of the Science Advisory Board (1935), p. 328.

[17] Various proposed reforms of patent office procedure, intended to cut down the bulk of patents and to increase to that extent presumption of the validity of those granted may well be more or less successful. But the difficulty in modern society of defining justly a property right in ideas is one which mere procedural change may be unable to correct.

year in cases where patent applications conflict with one another or with patents already granted; and this evil arises from the same basic impracticality of the monopoly over single ideas in modern multiple technology.[18]

Only two groups are likely to gain from this welter of useless patents: patent lawyers who thrive on litigation and the taking out of patents; and unscrupulous business-men who hold patents and can afford suit or threats of suit regardless of the merits of the case, and who have here a legal method of unfair competition. The great research laboratories are only incidentally technological centers. From the business standpoint they are patent factories: they manufacture the raw material of monopoly. Their product often is nothing but a "shot-gun," a basis for threatening infringement suit and scaring off competitors; or a "scare-crow," a patent which itself represents little or no contribution but seems, at least *prima facie,* to cover an important part of a developing art and hence permits threat of suit.

Beyond the "shot-gun" and "scare-crow" techniques, there is a third monopolistic method: the "drag-net," whereby corporations and individuals keep alive at the patent office great numbers of applications covering all potential developments in the field, revise those applications to cover any new competitive devices subsequently developed, and then take out the patents as their own and sue to protect them. The "drag-net" is also a means of involving competitive patent applications in the long and costly interference proceedings of the patent office.[19] Hence many individuals and corporations seek as a matter of course to keep applications pending as long as possible. Tardy response to patent office letters and requests to revise, the intentional filing of faulty applications which will require much correspondence about revision,[20] are the chief methods. An added incentive

[18] Interferences in the period 1924-33 lasted from 5 months to 10 years and 9 months, the average length being 2 years and 6 months. Testimony of Commissioner Coe, "Investigation of the Concentration of Economic Power," part 3, p. 855, appendix p. 1134.

[19] The TNEC disclosed this as a regular policy of Hartford Empire, the holding company which dominates the glass bottle industry. In its own memorandum, the company described "indirect patent protection" for its machines as including "applications which prevent the use or improvement of an existent or possible substitute for the device. This . . . seeks to block competing devices which would lessen our income. . . . We now have a number of applications which were filed to definitely forestall the development of competing machines by others." *Vide* "Investigation of Concentration of Economic Power," part 2, pp. 777-78.

The case of Selden, a patent lawyer who kept his automobile patent application alive from 1879 to 1895 is an item of patent folklore. He continually revised it to cover new developments, finally taking out his patent in 1895 and mulcting the industry, which had grown with no help from him, of millions in royalties. A long suit by Ford and other independents was necessary to stop him. *Vide* 74 Cong., 1st sess., "Pooling of Patents," Hearings before House Committee on Patents on HR 4523 (1935), part 1, pp. 545, 555-56. Also William Hard, "Better Business," *Everybody's Mag.,* xxx, p. 177 (Feb., 1914).

[20] The law set two years, then one, and now six months as the deadline for the applicant to answer each letter.

to this course of action is the fact than an extended period of pendency prolongs the real period of monopoly since the seventeen-year protection opens with the issuance of the patent.

The delay and expense of interference proceedings and infringement suits (and hence the potency of a mere threat to sue), the mass of useless patents (and hence the possibility of drag-net applications, or shot-gun and scare-crow patents), all play into the hands of the powerful and the unscrupulous who know how to profit by the deficiencies of the law. All this puts a premium on wealth. The patent field is one where sheer economic power often counts for as much as does the worth of the patent to the progress of science and the useful arts.

A case in point is the way American Telephone and Telegraph Company power, backed by a few patents developed in the Bell Laboratories, obtained and maintained a 90 per cent control of the talking picture recording apparatus industry, and then extended to an approximately 50 per cent control over theater sound reproducing equipment. Motion picture producers flocked to the Electrical Research Products, Inc., 100 per cent owned subsidiary of Western Electric, and accepted its onerous tying contracts and restrictions not, apparently, because they thought it had the best patents but because behind it lay the power of the telephone company. And they knew A.T.&T. could live up to its promise to protect them from the suits they faced at every turn. Power and wealth, not any proved superior contribution to the technology, created the monopoly.[21]

The discussion thus far has sought to analyze and criticize the rationale and the fundamental assumptions of the patent law, above all in the light of modern economic development. It has sought thereby to indicate the basic reasons for the failings of the patent system. The patent law is on the one hand a method of reward, to stimulate invention, and on the other a method of protection, to encourage practical exploitation. With respect to the first aim, the system has been forced to depart to a large extent from the law as originally contemplated. Machine technology, and the scientific method which it embodies, has been mainly responsible for this partial departure. And the industrial laboratory, embodying the methods of machine technology and financed by corporate business, is the resultant modern institutional adaptation.

With regard to its second aim, the patent law has likewise been found wanting as a method of protecting exploitation, the transposal into practice of the patented idea. Where the numerous contributions, large and small, are all actually part of one technological process, the exploitation of in-

[21] *Vide* testimony of Sidney Kent, "Pooling of Patents," 1935, pp. 513-16; of Clarence Colby, 71 Cong., 2nd sess., Hearings on S 4442 before Senate Committee on Patents, p. 31 *ff* (May, 1930).

dividual patents has meant suit and countersuit, intolerable mutual obstruction, and in industry after industry the threat of checkmate to further innovation and production. But here too the profit motive, like love, has found a way. It has constructed its own patent system about the patent law, at times ignoring the law, at other times using the unassailable legal power of the patent to fortify economic power. The resultant adaptation is the patent pool.

The pool may arise in either of two general ways: through the domination of some one firm by absorption of independents, or through agreement between two or more leading patent owners. Large corporations may make it their policy to buy up all the patents in the field and to maintain a laboratory as a source of patents, until the industry is "freed" by the domination of one giant.[22] Or a few large competitors may agree to pool their patents, exchanging general cross licenses, agreeing not to sue each other or contest the validity of each other's patents, and deciding upon the allotment of royalties if any. The art and the industry are freed, technologically, in both cases by the creation of great pools of patents and the abandonment of the individual patent monopoly as the basis for production and the reward for invention. And in both cases the impecunious inventor without resources for a struggle so weighted on the side of vested interest is forced either to sell his rights for what they will bring in a monopsonistic market, or to take a salaried position in the laboratory of a corporation already dominating the field.

Circumvention of the patent law may stop there and be, on the whole, socially beneficent. Usually, however, it does not stop there. A pool of numerous patents, backed by the wealth, prestige, and vested interest of a well-organized industry, is a potent weapon. The temptation is great to use the pool as a legal foundation and instrument for the preservation of monopoly—a monopoly, be it noted, not over some innovation or series of innovations but over an entire industry.

The licensing or cross-licensing agreement frequently becomes the instrument for exclusive tactics, for "stabilizing the industry" by restricting the entrance of outsiders through refusal to license.[23] Or it may be used for production control by license stipulations.[24] Or the participants may divide the field among themselves, each getting a segment of the in-

[22] *E.g.*, the American Tobacco Company, which pursued this policy as one means of enforcing its monopoly. It is significant that it never made serious inroads in the cigar industry, where the main processes are still manual.

[23] An admitted policy of the Hartford Empire Company: "Investigation of Concentration of Economic Power," part 2, pp. 411 *ff*.

[24] This was part of General Electric's regular license of the Westinghouse Company, for manufacture of incandescent lamps. Contract reproduced in "Pooling of Patents," appendix, pp. 3650-57 (1935). *Vide* also U.S. *v.* General Electric Company, 272 U.S. 476 (1926).

dustry or of the territorial market.[25] The result in any event is usually to change the patent from a limited seventeen year monopoly over particular inventions to a perpetual control over an industry. The pool makes the monopoly of a basic patent self-pepetuating. The field is seldom thrown open after the seventeen years for in the interim the basic patent holder has been the logical market for improvements and has had a head start in securing wealth and a predominant position in the industry.

A good example is the way in which the incandescent lamp industry has belonged to General Electric for the past half-century and seems destined to continue for the next. By using its head start from the Edison patent in order to accumulate flocks of patents, improvements real and worthless; by concealing the best methods of using patented devices and then taking out separate "improvement" patents upon them when the originals expired; and by backing its pool with threats of suit, General Electric has kept its monopoly unimpaired. The most interesting feature of this case is the way General Electric uses the newer patents for fields it does not bother to exploit (*e.g.*, lamp machinery, or bulb manufacture) for the sole purpose of reinforcing the monopoly of incandescent lamp manufacture, theoretically a free field for many decades. Thus, General Electric licenses noncompeting manufacturers of lamp machinery or bulbs *free of royalty* under these patents on condition that they sell such machinery or bulbs only to "domestic licensees of the General Electric."[26] Thus was Edison's patent monopoly made perpetual.

Despite the general concomitance of pools and trade restraint in one

[25] The contracts which created the electronics pool were the occasion for a comprehensive division of the industry on both scores. The participants exchanged *exclusive* licenses under all the patents they held, each for its own special field. Thus, *e.g.*, RCA found its radio monopoly reinforced by its own patents and by exclusive licenses under those of General Electric, A. T. & T., and Westinghouse, and the foreign companies with whom it contracted separately.

The contracts between RCA and foreign radio monopolies split up the world market comprehensively, each company giving the others an exclusive license to operate within its sphere. The parties tied up the geographical monopolies by each agreeing to transmit messages into the exclusive territory of the other only through the facilities of that company, each agreeing to accept messages from the outside only if they came over the apparatus of the other. (Amended govt. petition, suit in equity #793, U.S. *v.* RCA *et al.* District Court of the U. S., Dist. of Delaware. In "Pooling of Patents," part 1, p. 233 *ff.*) These latter clauses were outlawed by consent decree in 1935, 14 to 16 years after they were made; it was too late. (Amendment of July 2, 1935 to consent decree of Nov. 21, 1932, Dist. Court of the U. S., Dist. of Delaware, in equity, #793, U.S. *v.* RCA *et al.*)

[26] *E.g.*, "The Hofman Co. is not licensed to sell licensed machinery to purchasers . . . other than those who are listed." ("Pooling of Patents," 1935, appendix, p. 3852.) *Vide* also Hearings, *ibid.*, p. 958. *Vide* Willis Rice, "Brief in Support of the Proposed Supplementary Code for Lamp Manufacture," before N.R.A., appendix, *ibid.*, pp. 3818-52.

RCA used its original possession of the basic Fleming radio *tube* as a foundation for actions which gave it predominant control of radio *set* manufacture. It harried independent set manufacturers by suing them when they used the tubes of others and then crippled them by refusing to sell them its own. It refused to license any other tube manufacturers. Distributors were informed that they would receive tubes only in conjunction with orders

form or another, despite the tendency of pools to become self-perpetuating monopolies, the undoubted technological need which they satisfy has caused many to question whether pools are or are not *inherently* bad. The courts, in interpreting the Sherman act in the light of "reason," have accepted the pool as legal *per se* if its powers are not "abused." It is difficult to say what features of any such economic institution are essential, what features extraneous. It is not technological necessity but business expediency which motivates the formation of pools. It is the cut-throat competition of infringement suits or threat of suits which dictates agreement. Why should companies fight when they can get together and collect royalties from the consumer? Such considerations are inevitable in pool formation. There is no "pure" pool, created and run on the basis of purely technical considerations, because technicians do not create or run them. To the confusion created by multiplicity of patents and patents pending, to the obvious technological advantages of coöperation, the pool offers the added incentive of monopoly profits. Which is the "pure" and "inherent" motive; which the "abusive" and "extraneous"?

Experience with the Sherman act and its enforcement in attempting to set up such a cleavage between desirable essence and predatory excrescence, which is what the rule of reason seeks to do, is not very encouraging. Mere size of the pool, or even the existence of tying contracts and restrictions or the fact that it may constitute a perpetual monopoly, do not illegalize the pool in the absence of concrete evidence of predatory motives.[27] And the right, by license, to set the sale price for competitors and to restrict their output,[28] the general right to license or not to license as the patentee pleases, the right to employ the license in order to restrict use of patented articles, once they are sold, to those fields for which they are licensed[29]—all these basic weapons of the pool seem secure. Any successful attempt in the future to weed out of pools those elements which are economically undesirable will probably require statutory changes in the Patent and Sherman acts, for the courts do not seem willing to go far enough to offer any hope of success through stricter enforcement alone.[30]

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for RCA sets and the market for independent radios was thus cut off. (Federal Trade Commission, Report on the Radio Industry, 1923, pp. 4, 6, 38, 83-87.)

Meanwhile, RCA went about buying up, taking out, and securing exclusive licenses under receiving set patents, so that in 1922 when the Fleming tube patent expired, it was prepared to use its licenses and patents to maintain its monopoly over the now legally free field of radio tubes. Manufacturers licensed by RCA to make radio *sets* were now required to equip them initially with RCA's tubes. This restrictive clause was outlawed in Lord *v.* RCA, but RCA still holds the dominant position it thus gained. *Vide* 24 F (2d) 565; 278 U.S. 648 (cert. denied); 28 F (2d) 257 (1928).

[27] U.S. *v.* United Shoe Machinery Co. of N.J. *et al.*, 247 U.S. 32 (1918).

[28] U.S. *v.* General Electric Co., 272 U.S. 476 (1926).

[29] General Talking Pictures Corp. *v.* Western Electric Co., 304 U.S. 175 (1938); reheard, final opinion Nov., 1938.

[30] *Vide* Mortimer Feuer, "The Patent Monopoly and the Anti-Trust Laws," *Columbia Law Rev.*, 38:1145-78 (Nov., 1938).

The major purpose of the patent law is the promotion of technological progress. To what extent does this modern development, the patent pool, retard or advance the operation of the law in this direction?

The major hope for future invention must rest primarily with the business research laboratory and the professional inventor. And the basis for the exploitation of such innovations must be the functional group of patents rather than the individual patent. Both of these ends the patent pool fosters. The pool is not the same thing as the corporate laboratory, of course, nor does it create the scientific method which the laboratory represents and employs. But as long as we are to depend upon business to supply funds for laboratory equipment and salaries, and to take attendant risks, we must permit business to retain the only laboratory product in which it is interested: competitive advantage through monopoly over whatever is discovered. Business can maintain such an advantage either through secrecy about, or through patent protection of, the results of research. But secrecy negates disclosure to the public; it was to encourage such disclosure that the patent system was inaugurated. Patent protection of research results is, then, the only alternative. We must conclude that the capacity of business to accumulate patents is a definite benefit to the community in that it provides a marked incentive for investment in research[31] and encourages the disclosure and dissemination of technological information.

But to see the benefits is not to ignore the dangers to advance which the pool presents. We have shown that corporate research laboratories, the existence of which is, after all, subject to the profit motive, probably tend to be conservative, to confine themselves to "canned work." If, then, we must depend on "outsiders" for the revolutionary inventions, do they, given the competitive disadvantages under which they function, receive adequate support and protection? Further, since pools occupy a quasi-monopolistic position and are more or less free from competitive pressure, are they not too free to innovate or not to innovate as considerations of profit dictate? If that is so, is it safe to leave to business-men the power to reject or accept radical technical innovations with no outside pressure to force them to give the projects serious consideration?[32]

It is, however, hard to believe that on the whole pools *per se* retard invention. As far as the "outsider" is concerned, it may well be argued that

[31] Second Report of the Science Advisory Board, pp. 334-35 (1935).

[32] Much nonsense has been written, however, about the "suppression" of immediately practicable and significant patents by pools. There is evidence that pools buy up patents by the hundreds, many of them intended for no other use but to act as a club. But it is doubtful whether any general practice of suppressing practical inventions exists. Almost always it appears on examination that these unworked patents represent alternative or inferior processes or products or immature developments. Actual cases of suppression probably occur only where commercial, as distinguished from technological, feasibility is lacking or where short-sightedness and narrow conservatism dictate a stand-pat policy undisturbed by the pressure of competition. But even the latter is a danger.

independent inventions will be forthcoming in any case because of the inventor's love of his work and the prospect of fame, fortune, or a position of authority in the growing laboratories themselves. All things considered, it must be concluded that the pool is a distinct improvement over the patent law as originally contemplated in effecting technological advance under modern conditions. But as in the case of monopoly power, the danger is there none the less.

The patent system of today is obviously not the patent system contemplated by the original law and justified by the rationalizations of seventeenth century jurists and economists. In its operation we see injustice, the danger of technological retardation, and economically unjustified encroachments on the sphere of competition and freedom of trade. Can this new system be so regulated as to retain benefits and avoid evils? Can any attempt at reformist regulation, trying to keep up with and correct individual evils as they arise, keep close enough to the dynamic forces which it seeks to control in order to effect an enduring remedy? If not, there are two alternatives. One is a basic reconstruction of the patent system, and particularly of the patent pool, by redefinition of the patent privilege and by changes in the anti-trust laws. Such a reform must be restrained by the danger that any limitation of the value of the patent grant may thwart the original aim of the law—the stimulation of technological progress. Or some substitute method must be devised to attain that original goal, thus lifting once and for all the restrictive yoke of a patent law whose inherent inapplicability to modern society has created a confusion within which have arisen the dangerous modern developments.

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THE THEORY OF PUMP-PRIMING REËXAMINED[1]

Prior to a discussion of the basic problems of fiscal policy, explicit attention must be paid to the characteristic features of the private economy. The necessity of sufficient *net* investment must be stressed. The two problems of timing and general level of expenditure must be distinguished. In connection with the latter, reasons are advanced in favor of an early spending plan to combat a downward movement, and against a policy relying upon the remedial, cathartic action of the depression. The doctrine of the Multiplier is described, and its incompleteness as a theory of government expenditure is indicated. The neglected effects upon private investment must be considered, particularly the interactions of the acceleration principle and the Multiplier. Pure pump-priming is to be regarded as an extreme case. Expenditure has reactions on subsequent revenues, but it is not possible to reduce deficits by an increase in outlay, regardless of how progressive the tax system. Other things being equal, however, incomes with low marginal propensities to consume should be taxed most heavily. Finally, the experience of the last decade is considered and qualifications noted.

The Great Depression stimulated an interest in the problems of governmental fiscal policy culminating in the development of the doctrine of the Multiplier by Clark, Kahn, and Keynes. Similarly, the Recession of 1937 has once again brought to the fore the pressing problem of the effects of governmental expenditure upon the level of the national income and business activity. It is the purpose of the present paper to indicate certain difficulties and possible sources of confusion encountered in the analysis of this process.

Nature of the Private Economy

Of course, governmental expenditures do not take place in a vacuum. It is necessary in the beginning to set forth explicitly the basic features of the private economy forming the environment within which governmental action must take place. No attempt is made to justify the characteristics stressed beyond the assertion that in the recent business cycle literature they are regarded as fundamental. These are enumerated briefly as follows:

(1) The economic system is not perfect and frictionless so that there exists the possibility of unemployment and under-utilization of productive resources.

(2) More specifically, as emphasized in the recent economic literature, there exists the possibility of, if not a definite tendency toward, cumulative movements of a disequilibrating kind. That is to say, a substantial movement either upward or downward generates secondary forces which tend to act in the same direction and prolong the initial trend.

(3) There exists a desire of individuals to save on balance out of income; *i.e.*, to accumulate assets, earning or otherwise. This means that the average propensity to consume is less than one, at least at high levels of the national income. As a result, in the absence of substantial amounts

[1] A portion of this paper was delivered before a Round Table Conference of the American Economic Association at Detroit, Michigan, December 30, 1938. I wish to thank, but not implicate, Professors Fritz Machlup and Alvin H. Hansen whose respective unpublished manuscripts relating to this subject were kindly placed at my disposal.

of net investment, there will necessarily be a large degree of unemployment and a low level of business activity. For under the circumstances outlined, business enterprises as a whole cannot possibly recoup in consumption sales their previous disbursements to the factors of production; and a vicious downward spiral must necessarily follow.[2] If there is sufficient net investment, however, the dilemma immediately disappears. In this case the total amount paid out by business enterprises to the factors of production represents more than the costs imputable to the production of current consumers' goods, the excess being attributable to the creation of new productive equipment. It now becomes unnecessary for all of earned income to be spent on consumption. Equilibrium can still be maintained so long as new business assets are being created to an extent sufficient to compensate for factor income not expended on consumption.

(4) Although all business cycle theorists now grant the importance and necessity of proper amounts of net investment, there is perhaps insufficient recognition of the fact that *even in a perfect capital market there is no tendency for the rate of interest to equilibrate the demand and supply of employment*. The interest rate and asset price structure serve to equilibrate the holding of new and old securities of all kinds. This does not imply any tendency for the rate of interest to fall to a level which will call forth an amount of net investment sufficient to absorb all unemployment. In fact, the schedule of the marginal efficiency of capital may be extremely inelastic with respect to the interest rate so that no fall in the rate of interest, even into negative levels, would result in full employment. On the other hand, the outlets for capital investment might conceivably be so favorable that there would result more than "full employment," price increases, forced savings, windfall profits, etc. The amount of net investment must be regarded as dependent on dynamic factors of economic progress such as the amount of as yet undeveloped innovations, trend of population, past net investment, as well as upon the shifting state of confidence and expectations. We should expect, therefore, its behavior to be volatile and capricious, and that shifts in the schedule of the marginal efficiency of investment would dwarf into insignificance changes along the schedule caused by variations in interest rates. If we add to this the overshadowing effect upon savings of variations in the level of income as compared to changes in the interest rate structure, there remains still less basis for a belief in the equilibrating potency of the capital market. This means that in any community there exists a possibility of insufficient net investment, and perhaps in a wealthy community a likelihood of such an insufficiency.[3]

[2] Space does not permit a consideration of the necessity of assumption (1) in this analysis. For the sake of the argument, I neglect price changes in much of what follows.

[3] Mr. Keynes has made a point similar to this based upon the existence of liquidity preference, but the latter is not a necessary condition for this possibility of deficient net investment.

(5) Unless explicit reference to the contrary is made, I shall assume in what follows any fixed schedule of tax rates; it is also supposed that there exist no technical difficulties to prevent the government from financing deficits of the magnitudes discussed. No *a priori* assumptions are made concerning the future level of innovations and investment outlets.

The Timing of Governmental Expenditures

Under these circumstances the government is in a position to determine its own level of expenditure at each instant of time, to influence more or less strongly the subsequent behavior of all parts of the private economy, and to affect its own future tax revenues. The nature of these relations we must investigate. In order to free ourselves from possible preconceptions, it should be pointed out that although there may exist a set of tax rates which will balance the budget over time at a level of expenditure considered necessary or desirable, there need not necessarily be such a set which will do so and at the same time lead to full (or ¾, or ½) employment. We must not be committed in advance to a naïve belief that over time surpluses will always balance deficits.

For purposes of the analysis it is convenient to introduce a somewhat artificial distinction between two aspects of fiscal policy. (a) Suppose we are given an arbitrarily preassigned cumulative deficit which we are permitted to run over a period of time (say, two decades), how shall we "spend" this deficit as wisely as possible? This is the problem of timing of expenditures.[4] (b) The other aspect of perhaps even greater interest centers upon the determination of the optimal amount of cumulative deficit that should be incurred over a period of time.[5]

As we shall see, these two aspects must necessarily be mutually interdependent. The better timed a policy of spending is, the smaller need be the long-time level of expenditures. On the other hand, given a low level of governmental expenditures covering only administrative expenses, there will be little room for the discretionary determination of expenditures.[6] As relief and welfare activities become mandatory, another non-discretionary element is introduced, even though deficits now are likely to vary inversely

[4] Of course, to those who determine actual policy, the problem does not present itself in this form. One cannot know in advance what level of deficit will be best, and it would be poor management to act in terms of some preassigned limit. Even more important, correct decisions necessarily involve a detailed diagnosis of the state of the private economy and correct foresight as to its future movements; no amounts of theorizing can guarantee this. But waiving the problem of foresight, over a period of years *some* cumulative deficit will in fact have been incurred. With time stretched in back of us there will necessarily be some time shape of expenditure which will result in the most desirable pattern of national income, and it is this which we seek.

[5] The deficits referred to need not be positive. Sound policy under some circumstances may require debt retirement over time; or in the absence of an outstanding public debt, the sterilization of surplus tax receipts.

[6] Of course, room for discretionary action in the realm of tax policy still exists.

with the state of business activity. If still higher levels of expenditures and deficits are to be permitted, then the problem of timing becomes of interest. However, if an extremely liberal view is taken toward deficits, timing again becomes relatively unimportant; in this case, one merely spends whenever it is needed, and only the boom period offers analytical difficulties. It is the intermediate level, where there is room for the exercise of discretionary powers and yet a need for weighing carefully the comparative advantages of spending each dollar at different times, that is emphasized here.

In order to investigate the optimal time shape of expenditures, it is fruitful to employ a marginal analysis weighing the effects of a dollar's worth of expenditure at different phases of the business cycle. This done, almost anyone will give assent to the proposition that a given level of deficit spending in time of full or high employment is less beneficial at the margin than during depression; in time of price rise, high boom, excess spending may be absolutely as well as relatively harmful. If it is necessary as a condition of the problem to cut expenditures at some time, other things being equal, it is surely best to do so when employment is high and rising.[7]

Really burning differences of opinion concerning proper timing of policy exist only with respect to the period of collapse and depression. There prevail two sharply opposed schools of thought, typified respectively by Professor Slichter and Mr. Harrod. The former holds that expenditures should not be undertaken until the bottom of the depression has been reached, lest by alleviating the situation the government should prevent necessary corrective adjustments in the price-cost structure. From this point of view the depression is a cathartic device by means of which the maladjustments of the boom can be eliminated.

There may perhaps be noted a growing reaction in the literature against this point of view. Increased stress is being placed upon the *disequilibrating,* cumulative aspects of the downward movement with a consequent emphasis upon the need for early strong governmental expenditures in order to check an unnecessary, undesirable, vicious downward spiral which as it proceeds creates more maladjustments than it cures. Even if the deficit spending does not turn the tide, its beneficial indirect effects in slowing down and preventing decreases in the national income are likely to be very high at this time.

Even if it is granted that an increase in wage and other costs is one of the factors responsible for the downturn, it does not necessarily follow that

[7] However, strongly discontinuous changes in policy are to be avoided; there should be a gradual tapering off of expenditures rather than a sudden break. Similarly, continuous and smooth operations are desirable at any phase of the cycle. A sustained effort at spending during depression may be much more effective than an equally costly series of abortive spurts which do not attain the "threshhold" at which spending begins to "catch on."

the best policy is to let things get so bad that they will correct themselves. In the first place, as has been seen, the downturn breeds maladjustments of its own which may be far worse than those of the boom. Second, there is good reason to doubt that much downward flexibility exists in an economy such as our own; certainly our experiences of the last decade must raise doubts on this score. Finally, we must not lose sight of ends in our preoccupation with means. Our aim is a higher national income and employment. It is not a policy of wisdom to let business become *bad* merely in order that it can be improved.[8]

However, each decision must be made in terms of the previous behavior of the economic system. It is necessary to consider each downturn on its own merits in deciding whether or not expenditures should be hastened. Some general types may be considered. First, consider a downturn due simply to the giving out of investment opportunities. Suppose that previously there has been a fairly long period of high business activity during which a considerable volume of investment in durable equipment, housing, utilities, etc., has taken place. As a result several new industries have grown to maturity and henceforth require only replacement in small amounts, and no new outlets appear on the horizon. If, then, business begins to slump, shall the government immediately begin its spending or wait until the process has worked itself out for some time?

In such a case there seems to be no good reason for letting the system go into a vicious downward spiral. The least that governmental policy can do is to attempt to minimize the "secondary depression" which will ensue. The reader will perhaps recognize in this example some of the features characteristic of the Great Depression of 1929. While I do not wish to exaggerate the potency of fiscal policy in combating such a widespread slump, I do feel that it would have been wiser for the government to have spent more heavily in 1930, 1931, 1932, and 1933, even at the expense of the later years.[9] This would probably have proved to be cheaper in the long run, and certainly cheaper to accomplish the degree of recovery actually attained.

Another type of downturn of great interest today is one which follows

[8] To put the matter most crudely, the point of view under consideration represents the large-scale application of the principle of the industrial *lock-out*. The most favorable case for its employ would be when (1) the period of decline and downward revision is very short; (2) prices of cost factors really can be made to fall more than prices of products; (3) the factors of production actually "learn their lesson" so that costs stay down, or rise less rapidly than they otherwise would when business begins to improve. The last point must be emphasized. A little thought will show that it is crucial for the success of this program; otherwise the depression will have been a needless period of destitution, curtailed consumption, and foregone investment.

[9] Of course, federal deficits were run in the closing years of the Hoover administration. On the other hand, there was a precipitous decline in capital investment by the state and local governments in the early thirties.

the accumulation of excessive inventories, premised upon a rate of price increase which cannot be maintained. Once the rate of price increase slackens, even though prices do not fall absolutely, the inventories are seen to be excessive, and new orders drop off sharply. Experience suggests that such a recession is not likely to be as serious and long lasting as the previous type mentioned, provided that the downward movement does not generate strong secondary momentum. Orders being curtailed, inventories can be worked off as long as sales are maintained. Waiving the difficulties of quickly engineering a spending policy, there seems to be every reason in this case for the government to act promptly so as to sustain the national income and aid in the orderly reduction of inventories.

The Multiplier

Before turning to the consideration of the optimal level of long-time deficit financing, it is necessary to examine various mechanical aspects of the impact of governmental expenditures. We have seen from the beginning that in a community where there is a desire to save out of income, consumers' buying will not be large enough to cover their cost of production unless the deficiency is made up by means of private investment, or what comes to the same thing, by governmental expenditures in excess of receipts. That these last two are essentially similar can be shown if we look more closely into the nature of net investment. From the present point of view, the importance of investment consists in the fact that it involves disbursal of income to the factors of production while not at the same time bringing to the market goods which must be currently sold. Because of this, the dilemma of thrift can be averted, provided that the excess of factor income over current costs of production is large enough to offset saving on the part of individuals.

It should be noted, and this is a factor insufficiently stressed by most writers, that all kinds of investment are not equally useful from this point of view.[10] For after all, private investment is motivated by the hope to make profits; sooner or later the currently produced new capital equipment will result in an increased flow of consumers' goods upon the market. The current outlay on investment is a surplus from the point of view of the present, but must be paid out of future consumption revenues. The most favorable kind of investment from the standpoint of bolstering up the national income is that which does not increase the supply of consumers' goods for a long time to come. It is not surprising that the construction of a building which will yield consumers' services over an amortization period of half a century should be regarded as more important in this respect than

[10] In the modern literature investment means many things; in this paper I stress its "expansionary demand" aspect.

investment which takes the form of a temporary increase in inventories.[11]

We see, therefore, how an excess of governmental expenditures over revenue is income creating in the same sense as investment. Indeed, it is likely to be the best kind of investment since it need not involve the future sale of extra consumers' goods. When account is taken of the qualitative differences between categories of investment, the strategic importance of fiscal policy becomes apparent, even though the absolute magnitudes of government deficits are a relatively small fraction of total net investment.

This also suggests that the present emphasis upon *self-liquidating* public investment may be misplaced. Aside from the fact that it is poor social economy to saddle overhead charges upon the use of governmental services (as is done in the case of a toll bridge), it may be equally undesirable for government activity to ape the business practices of private enterprise. If the government employs the same calculations with respect to action as private business, it may soon find itself in the same dilemma as confronts a purely individualistic economy.[12]

The doctrine of the Multiplier is nothing more than a recognition of the strategic importance of investment in determining the level of the national income. The crucial assumption upon which it stands or falls is that consumption expenditures and savings are rigidly related to the level of national income. The passive character of consumption cannot be sufficiently stressed. There has been some controversy over the timing of this relationship, Mr. Keynes being of the opinion that it holds necessarily instantaneously. There is no question that at every instant of time there will exist respective amounts of investment, consumption, and national income, but this instantaneous relationship will be anything but stable; an increase in investment will in the extreme short run result in little or no additional consumption.[13] An increase in income can make itself felt in increased consumption only after some period of time; at the risk of oversimplification

[11] The point to be emphasized is that the last kind of investment is likely to be followed by disinvestment in the near future.

[12] As the Swedish experience shows, there may be a tendency for investment activity of governmentally owned industries to follow the same perverse cyclical pattern as that of private concerns. At this point a word of caution is in order concerning the advisability of transplanting other commercial practices into governmental administration, as for example, automatic amortization of any deficit incurred over a given period of time, or the keeping of a capital budget. The latter is usually regarded with favor because it helps to "sell" a spending program. However, the knife may cut both ways. The proposed accumulation of a large Old Age Insurance Reserve Fund was after all a straightforward application of the principles of a capital budget! Correct public policy, like correct entrepreneurial behavior, implies freedom from the conventions and shibboleths of bookkeeping techniques.

[13] Unfortunately, the timing of the consumption-income relationship has become involved in the equality of savings and investment controversy. Space does not permit a discussion of the reasons why I regard this to be a mistake. It should be pointed out, however, that in most contexts the "instantaneous" relations of Mr. Keynes are best regarded as stationary state relationships of the type met with in comparative statics. As such, they are special cases of the dynamic time sequence analysis.

we can assume that consumption of one "period" is related in an invariant way to income of the previous "period."

By means of the Multiplier we can deduce the time behavior of income and consumption from a knowledge of the time shape of investment, provided we know the initial level of consumption. If we know consumption and investment in the first period, the national income is automatically known by addition. From the consumption function the consumption of the second period is immediately determined. This plus investment of the second period provides us with income of the second period. Consumption of the third period is derived by means of the consumption function from the second period's income, and so the process continues indefinitely.[14]

Let us consider now the various shapes of income which will result from certain investment patterns. If investment has always been identically zero in the indefinite past, the national income will be at a level where the average propensity to consume is equal to unity with consumption equal to income. A constant positive level of net investment will result in a constant higher level of the national income. The ratio between the increase in income and the increase in investment will exceed unity, being equal to the reciprocal of the marginal propensity to save averaged over the range of movement. A regular periodic fluctuation in investment will be accompanied by a regular periodic movement in income, the latter lagging behind at the turning points. If the average propensity to consume is sensibly constant, the average level of income over the whole cycle will bear the same relation to the average level of investment as do stationary levels; otherwise the ratio will be somewhat smaller.

Assuming that the time shape of private investment is given, preferably at some constant level, let us now introduce *net income creating expenditures* of the government. For simplicity the marginal propensity to consume will be assumed to be constant, and price and cost changes will be ignored. Each pattern of expenditure will result in a new pattern of additions (or subtractions) to the national income as compared to its level in the absence of governmental action.

The first pattern of expenditure to be considered is fundamental, since by superposition we can construct all other patterns from it. It consists of a single impulse of expenditure. From the work of J. M. Clark and others it is well known that this results in additional income in the first period equal to the original governmental expenditure. Because the marginal propensity to consume is less than unity, and there is no additional investment forthcoming, the national income decreases in geometric progression, in each period being only a fraction of that of the previous period, until

[14] It is necessary to emphasize that investment can take any preassigned shape. It must not be thought that investment of one period must be equal to what people *wish* to save out of the previous period's income. To insist on this equality would be to determine investment rigidly and freeze the national income at a constant level.

finally the effect of the initial impulse of expenditure is completely dissipated.[15]

A second pattern of interest consists of the sudden introduction of a positive, maintained level of expenditure. This causes the additional national income to increase at a decreasing rate until finally an asymptote is approached equal to the reciprocal of the marginal propensity to save.

A third pattern which is really the reverse of the previous one consists of a sudden reduction of expenditures from a previously maintained level. In this case, symmetry demands that the national income fall at an ever decreasing rate approaching asymptotically the level of income which would exist in the absence of any expenditure. In fact, any finite amount of expenditure will result ultimately in a return to the previous level of the national income. It may also be mentioned that cyclical movements in the deficit will result in cyclical changes in the national income, lagging behind at the turning points.

The Effect of Expenditure upon the Level of Total Investment

It is sometimes thought that the principle of the Multiplier as outlined above provides a complete analysis of the effects of governmental expenditures upon the national income. This is completely without foundation. Given the level of total net investment, the Multiplier determines the movements of national income. But, in and of itself, knowledge of the level of government deficits throws no light upon movements of total investment. Our problem may be broken up into two components: (a) What is the effect upon national income of any given change in total net investment brought about by a given fiscal policy? (b) What change in total net investment will result from a given amount of expenditure? The latter question is as important as the former and is left unanswered by the Multiplier analysis.

Thus, it is conceivable that a dollar's worth of government investment might cause a simultaneous disinvestment of ten dollars on the part of private individuals, which with a marginal propensity to consume of two-thirds would result in a total *decrease* in the national income of twenty-seven dollars. The *government Multiplier* would therefore be negative even though the *total investment Multiplier* is positive. The former is equal to the investment Multiplier times the ratio of total additional net investment to the initial governmental expenditure. The latter ratio depends upon the amount of private investment induced throughout all time by the initial governmental net income creating expenditure, and it is to this problem that we must now turn our attention.

We have seen earlier that the amount of private net investment is related

[15] If the marginal propensity to consume were equal to, or greater than, unity, the national income would never return to its previous level. A single dollar of expenditure would in sufficient time add any preassigned amount to the national income. This case bears

to dynamic factors of growth and change operating within the economy. Given no fall in interest rates, no technological, institutional change, and no increase in the level of consumption and income, net investment would take place only until the level of capital equipment became optimally adjusted to the existing state of the system. When this has been accomplished, net investment will cease completely and the production of capital equipment will consist entirely of replacement. Obviously, from what has been said before, such investment will provide no stimulus to sales and income, being indistinguishable from outlays to direct factors of production; in the calculation of the national income it would involve double counting to include both consumption sales and the costs of production of the consumption goods.

To facilitate the systematic consideration of the induced effects on private investment of governmental expenditure, Professor Hansen has developed a simplified model sequence which ingeniously combines the familiar *acceleration principle* or Relation with the Multiplier analysis. He assumes that induced private net investment is proportional to the increase in consumption from one period to the next, the numerical factor of proportionality being known as the Relation.

On the basis of this assumption, it is possible to trace out the effects upon income of different patterns of expenditure. I have done this in detail elsewhere[16] and so confine myself to a brief summary of the results obtained from the sudden introduction of a constant level of expenditure. As expenditure is introduced, consumption will grow as determined by the Multiplier. This increase in consumption will induce some amount of private investment, which together with the new stream of government expenditure constitutes the new total of investment. This in turn leads to further consumption, induced private investment, etc. Depending upon the numerical values chosen for the marginal propensity to consume and the Relation, the following different qualitative behavior patterns of income emerge:

(a) For small values of the Relation and marginal propensity to consume, the rate of growth of consumption tapers off so that induced private investment becomes smaller and smaller approaching zero in the limit. Additional national income increases more and more slowly, finally approaching the level which can be maintained by "multiplication" of the continued stream of the deficit alone. The effect of the acceleration principle has been to increase somewhat the governmental Multiplier, but not to change the level of the new stationary equilibrium.

(b) For larger values of the Relation, the induced private investment

a superficial resemblance to the pure case of pump-priming to be discussed later, but is not really what the adherents to that point of view have in mind.

[16] P. A. Samuelson, "Interactions between the Multiplier Analysis and the Principle of Acceleration," *Rev. of Econ. Stat.*, May, 1939, pp. 75-78.

will be of greater magnitude during the first few periods. However, the rate of increase of consumption will taper off so rapidly that the national income will turn down, even though a steady stream of governmental expenditure has been maintained. As the system slumps, there will be some induced private disinvestment; this will decrease as the decline becomes less and less precipitous. Before the additional national income becomes zero, the system will again turn up. But this time the upswing will not go as far as previously, and the subsequent downswing which follows will be of smaller amplitude than its predecessor. Succeeding fluctuations will be damped until finally the national income will approach the asymptote justified by the governmental spending alone. The induced private investment, even though transient, results in a still larger governmental Multiplier.

(c) If we consider a system characterized by still larger values of the marginal propensity to consume and Relation, the successive oscillations of the national income are of ever increasing amplitude, even though the average level of the system is that given by the Multiplier formula.

(d) For very large values of these parameters, the induced private investment will be so great that the time increase of consumption will be unchecked. Consumption grows ever more rapidly, leading to more and more induced private investment, which yields in turn still greater increases in consumption. The system never comes to a turning point, but continues upward at a geometric rate of increase. Throughout all time an infinite amount of private investment is induced, yielding a governmental Multiplier of infinity. The gradual cessation of governmental expenditure will not stop the upward movement.

The Pure Case of Pump-Priming

The last type of behavior exemplifies the situation that may be termed the pure case of pump-priming. It suggests that some minimum initial amount of spending will "break the log jam of private investment," "form the spark to ignite business activity," "act as a catalyst to speed the upward movement," etc. Not attempting to pursue too literally the features of these physical analogies, we find that there is one essential common element. All presuppose that the private economy is in *meta-stable* equilibrium, that a sufficiently strong upward displacement will "set off" forces powerful enough to return the economy to a high level of employment, and keep it there. An infinitesimal upward impetus need not be sufficient; else, why should not a single individual rather than the government bring about the revival?

Not all pump-primers base their case upon the action of the acceleration principle. Some attribute the insufficiency of net investment to the fact that the slump in business has produced a perverse state of pessimistic expectations which inhibits the entrepreneur and prevents him from per-

forming bold acts of investment. They argue that the introduction of known innovations is a function of the current state of activity of the system. Investment waits upon an upturn of business, but business cannot improve except with the aid of substantial investment. The government by breaking through the vicious circle can motivate the business community to do the things which will ultimately prove to be justified.

It is to be emphasized that pure pump-priming is an extreme case. Actually, there is a continuum of possible values for the ratio of induced to initial investment, ranging from zero to infinity.[17] No one should be seriously disappointed if a spending policy over a number of years does not create prosperity in perpetuity. It is to be presumed that any upturn will eventually come to an end, either dying a natural death as investment outlets give out or succumbing to self-created maladjustments. One must be content, therefore, with the "multiplier" effects of spending and any possible induced private investment which may be forthcoming.

The Reaction of Expenditures on Revenue

Throughout it has been implicitly assumed that high expenditure levels and deficits must go hand in hand. This assumption has completely ignored the increasingly important school of thought which argues that a maintenance of government expenditures will so increase the national income that even the same schedule of tax rates will yield revenues sufficient to balance the budget. According to this point of view, it is cheaper in the long run to spend more rather than less.

I shall examine the validity of this belief *under the assumption that our economy may be facing a period of reduced investment outlets so that the induced investment and pump-priming aspects of expenditure can be neglected.* Any tax system can be assumed regardless of how progressive it may be, the only restriction being the obvious one that the total tax bill of any person must not be increased by as much as one dollar as a result of an extra dollar's income. This is not a serious restriction, since any tax formula which is administratively feasible will meet this requirement.

Under the hypotheses made, it can be stated as a theorem of the Multiplier analysis that *the increase of expenditure of an extra dollar cannot result in increased tax revenues of as much as a dollar even though all succeeding time is taken into consideration.* This conclusion holds even though tax rates are almost completely confiscatory, and marginal propensities to consume are very small. It also holds if there are two or more

[17] It is, of course, possible that there may be disinvestment induced by a fear of mounting deficits. The empirical record of the behavior of private investment in the thirties suggests, although not conclusively, that whatever the entrepreneur may think or say, he still regards high and rising current revenues as the most powerful motivating factor in making investments. Also, there may be disinvestment due to the reduction of inventories made possible by government spending.

groups in the community, one of which has a very low marginal propensity to consume and is taxed very heavily, and the other has a high marginal propensity to consume and a relatively low tax rate.

The truth of this proposition is not intuitively obvious. It can be expressed in another equivalent form which may gain more ready acquiescence. *A higher maintained level of expenditure will result eventually in a higher national income and higher tax revenues; but the increase in tax revenues will necessarily fall short of the increased expenditure so that there will be a larger deficit per unit time.*

A rigorous numerical proof will not be presented here, but the reasoning involved can be briefly sketched. In the case of a single dollar of expenditure, the subsequent taxes collected out of the additional national income created are essentially of the nature of leakages. The higher the rate of taxation, the more rapidly the national income decreases, and the smaller are tax revenues at a later date. The sum total must add up to less than one. Looking at the problem from the second point of view, let us suppose for the sake of the argument that higher expenditures do result in higher national income and higher tax revenues sufficient to balance the budget. The result is a contradiction, since at the new high level of the national income there is no longer a deficit to be "multiplied." In the absence of increased private investment, the system must fall back to the level which can be maintained without deficit financing.

The objection may be raised that the cash deficit is not so important as the net income creating expenditures of the government. Cannot a progressive tax system be devised which will balance the budget through taxation of the increases in income contributing little to consumption, and at the same time provide a positive amount of net income creating expenditures? Unfortunately, the answer is incontrovertibly in the negative. The net income creating expenditure under our hypotheses is necessarily directly proportional (but not equal) to the cash deficit. Of course, the more we tax incomes with low propensities to consume, the smaller need be the deficit to accomplish the same purpose. In fact, a new canon of taxation can be enunciated as follows: *private investment being given, any amount of revenue should be raised by taxation of income with the lowest marginal propensity to consume up to the point where marginal propensities to consume are equalized.* This will maximize the national income.

Conclusion

I should now like to turn to a consideration of the experience of our own economy in recent years. Professor Hansen, writing in 1937, put forward the point of view that

> The recovery experienced in the United States in 1935-37 can be characterized as a consumption recovery. By that I mean that the expansion in income, employ-

ment and output was based mainly on a rise in consumption. There had occurred, to be sure, a very considerable increase in real investment, but investment for the most part followed consumption; it did not, except in limited degree, lead the way. . . . Two factors were of primary importance. The first was the rise in the demand for durable consumers' goods of which automobiles were the most important single category; the second was the income-stimulating expenditures of the federal government.[18]

This was in contrast with previous recoveries which were mainly initiated and sustained by large bursts of anticipatory private investment. Because of its consumption nature a dilemma must be faced. Such a recovery can proceed no farther than it is pushed. It has no momentum of its own. It has no inner power to complete its own development.[19]

This illuminating and challenging thesis merits careful consideration. It can be subjected to only a brief examination here. First, some question must be raised as to the signficance of the distinction between this "consumption" recovery and other types. As far as investment in durable consumers' goods is concerned, it is well known that they partake of the nature of investment goods in general. There are, of course, differences in the contractual relations incident to purchase, ownership, and financing, but these must not hide the essential similarities. It is hard to find basic differences between the purchase of an automobile, a taxicab, or a truck, between the purchase of many home power units and a central dynamo, between the construction of a house for personal use or for leasing. Moreover, investment in durable consumers' goods follows the same pattern as other investment; *i.e.*, fluctuations in new installations greatly exceed those of the total stock; there is a tendency toward "death by natural causes" of such investment, etc. On the whole, economists and statisticians have wisely emphasized the likenesses of these two types of investment instead of concentrating upon the consumer and producer aspects.

The other feature justifying the characterization of the recovery as a consumption one also rests upon a verbal distinction. It is true that governmental deficit spending stimulated consumption, but by the Multiplier so would have an initiating burst of private investment. Only by not looking upon deficit spending as investment and by skipping to the following time period can the recovery be made to seem a consumption one.

Finally, can a distinction be drawn upon the basis of the operation of the acceleration principle? Analysis suggests that a burst of private investment in one isolated section of the economy should induce private investment elsewhere according to the familiar acceleration principle. This may lead to a temporary peak in income followed by a decline to the level which can be sustained by the net investment stimulus without the aid of induced

[18] Alvin H. Hansen, *Full Recovery or Stagnation?* (New York: W. W. Norton and Company, 1938), pp. 276-277.

[19] *Ibid.*, p. 282.

effects. If the net investment stimulus ceases, the system must still further decline just as it must if a maintained level of deficits is suddenly contracted. There is a point for point correspondence and isomorphism, therefore, between recoveries initiated by private and governmental investment.[20] The long-run implication of Professor Hansen's hypothesis of a possible secular stagnation of industry must, however, be regarded with the greatest interest.

I have not supplied an answer to the question as to the desirable long-time level of expenditure. That must depend upon what the future holds in store for us and upon the weighing of political imponderables. It is my personal conviction, however, that in the uncertain modern world we must heavily discount costs in the far future of present policies. Some doubt may be entertained as to the possibility of maintaining a balanced budget in a democracy under adverse international and institutional conditions. If the real national income can be increased by five or ten per cent over a long period of years only at the cost of incurring a debt of some tens of billions of dollars, I for one should consider the price not exorbitant.

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[20] Much of the analysis of the downturn which seems to rest upon the operation of the acceleration principle follows equally from the action of the Multiplier alone. An uncompensated decline in deficits must lead to a downturn. From the Multiplier, consumption should lag behind income; this is strengthened by the occurrence of business losses following the downturn, and by the drawing upon savings and cash reserves by individuals at the onset of the depression. The relation between gross business investment and the increase in consumption does not appear to be strong in the yearly data of this period.

PRODUCTIVITY, WAGE RATES, AND EMPLOYMENT

Our economic system has demonstrated greater ability to produce goods than to distribute the buying power to consume them. Spurgeon Bell's recent book attributes this shortcoming to the way productivity gains are distributed, with the implication that too much have been diverted to higher wage rates, and too little to lower prices. Reëxamination of his data reveals that the evidence is conflicting. Events, industry by industry, show that wage costs per unit shift closely with productivity, but that capital charges do not. While unit charges to consumers vary somewhat with productivity, and while output at times varies with prices, the connection between productivity and prices is very dim. Productivity gains went largely to profits in the 1920's, and to consumers and wage rates in the 1930's. These facts neither support nor contradict Bell's conclusions. They do suggest the need for deeper theoretical investigation of the problem of the proper dynamic balance between productivity, prices, profits, and wages, in the light of their repercussions on the distribution of income and on expenditure, savings, and investment, if full employment is to be maintained.

One of the outstanding characteristics of our present economic system is that sharp increases in industrial production do not carry with them a volume of expenditure sufficient to provide markets for the increased production. Four times in the past twelve years, in 1928-29, 1933, 1936-37, and late 1939, industrial production has spurted sharply upward, only to fall back as sales failed to keep pace with production. Whether this phenomenon be explained in terms of the failure of the propensity to invest to keep pace with the propensity to save, or whether it be explained in terms of the disappearance of the automatic readjustments of competitive markets as a result of monopolistic competition, the result is the same: our economic system cannot find ways to move into consumption the goods which our technical productive apparatus stands ready to turn out in such abundance. While Russia suffers because her socialist economy cannot produce the goods her population clamors to buy, we suffer because our capitalist institutions fail to generate the buying power to move into consumption the goods we can so readily produce. As a consequence, millions of men are unemployed.

Facing this situation, any study which attempts to clarify the facts concerning the key elements in the problem must be given careful attention. The latest Brookings publication, *Productivity, Wages, and National Income,* is such an attempt.[1] In the words of its jacket, "it indicates how the gains from increasing productivity are distributed among the groups participating in production and the consuming public; and the effects of the existing distribution upon employment and national income."

This article does not attempt to review the book, in the sense of presenting a careful appraisal of its workmanship with respect to statistical technique, objectivity of presentation, conclusions reached, and their value to students and the profession. Questions which might be raised with respect to the significance of the index numbers used, or of their reliability when changing

[1] By Spurgeon Bell, Brookings Institution, 1940.

composition (as of railway traffic, tobacco products, or auto output) affects their meaning, will not be examined here. Rather, this article is devoted to an examination of the major economic conclusions reached, and a consideration of how far they are supported by the data presented, taken at full face value.

The book examines the four major industrial groups—manufacturing, mining, railroads, and electrical utilities—and five selected manufacturing industries—automobiles, iron and steel, paper and allied products, cotton textiles, and tobacco products. For each major group, and each selected industry, the available data for the period since the first World War are examined to determine changes in output per man-hour, changes in labor and fixed capital employed in production, and changes in charges to consumers and in remuneration to labor and capital.

The major conclusions reached are:

(1) The volume of production in general did not increase proportionately to the increase in productivity per man-hour.

(2) The restriction of employment is related to the failure of output to increase in proportion to productivity.

(3) The failure of output to increase in proportion to productivity is the result of a combination of factors.

When it comes to explaining *why* output "failed to increase in proportion to productivity," however, the author makes little use of his data. After pointing out the obvious facts as to the decline in the importance of railroads, and the upset political and economic conditions since 1929, the book turns to a purely theoretical (and highly over-simplified)[2] analysis. This leads to the findings (a) that productivity passed on as higher wage rates per hour does not generate reëmployment of the displaced workers; (b) that productivity passed on as higher returns to capital does not generate reëmployment; (c) that productivity passed on as lower prices to consumers does generate reëmployment.

Solely on the basis of this theoretical discussion, the general conclusion is suggested that a part, at least, of recent unemployment has been due to shifting productivity gains too much to higher wages and higher profits, and too little to lower prices. In fact, there is the implied inference that if the gains had been passed on entirely as lower prices, chronic technological unemployment would not have occurred. Whether employment would have *risen* as rapidly as available labor force, however, is not considered.

The relation of wage rates to employment has been one of the most hotly-contested areas of economic speculation within recent years, and the bibliography of theoretical studies on the problem is a vast one. Depending

[2] For example, he assumes that relief payments to unemployed are currently offset by tax contributions which "provide the income for the support of the unemployed" (p. 181). The actual facts of the past decade hardly support the contention that all relief payments come from current taxation.

upon the assumptions chosen, effective cases can be made out to prove that high wage rates impede full employment, or that high wage rates facilitate employment. There have, however, been few attempts to verify these theoretical conclusions by appeals to the facts.[3] This Brookings study promises to throw light on the conflicting arguments by an extensive marshalling of the available facts. It is quite disappointing, then, to find that its final conclusions take little account of the facts presented, but rest instead on an incomplete statement of certain portions of the traditional theories.

Not only are the fundamental economic ideas recently associated with the names of Chamberlin and Keynes ignored, but even the earlier Brookings publications which have wrestled with these same ideas go completely unrecognized. Moulton's insistence that savings and capital formation are not necessarily identical[4] is not compatible with the treatment of corporate savings and of dividend disbursements as on all-fours with wage payments.[5] Brookings' demonstration (antedating Keynes) that disbursements to high-income groups go largely into savings, and relatively little into consumption expenditure, is given no recognition,[6] nor is its bearing upon the significance of changes in the distribution of income explored. Even the fundamental conclusions of *Income and Economic Progress,* as to the effects upon employment of the way gains in productivity are *passed on* by corporations,[7] are made little use of in interpreting this study, the most ambitious attempt to bring together data bearing on that precise point. Depreciation, for example, is treated as one of the "external costs" paid by each industry in determining the income left for distribution. The effects of depreciation policy upon prices and employment will vary according to whether the depreciation deductions represent replacements or additions to plant, idle cash balances, or investments in securities. Thus the failure to consider these wider theoretical problems affects not only the analysis of the data, but even the organization of the data themselves. (In Appendix G, the author indicates that he recognized some question as to the correctness of his handling of depreciation.)

A second shortcoming of the study is its failure to discriminate within the period considered. Data were examined covering the whole period from 1920 to 1938. It is abundantly clear from the charts in the book that many of the developments during the decade of the 1920's were greatly different from those of the next decade. These differences are particularly striking

[3] A notable exception is the article by Paul H. Douglas, "The Effect of Wage Payments upon Employment," *Am. Econ. Rev.,* vol. xxix, pp. 138-157, March, part 2, 1939.

[4] Harold G. Moulton, *The Formation of Capital,* pp. 136-154.

[5] Thus note the statement on p. 182, referring to payments to capital, "More might be set aside for investment purposes and less spent for consumption goods; but the total would not be affected."

[6] Maurice Leven, Harold G. Moulton, and Clark Warburton, *America's Capacity to Consume,* pp. 91-109, 1934.

[7] Harold G. Moulton, *Income and Economic Progress,* 1935.

with reference to the distribution of gains in productivity among the factors. Despite this, practically all the discussion and conclusions are based upon either the over-all changes for the two decades, or the changes between the two high periods, 1923-24 and 1936-37.[8]

For the reasons mentioned, the elaborate formulation of data in the book lends no additional credence to the conclusions reached from the hasty theoretical consideration—except to those who are so stunned by the weight of the statistics that they fail to see that the major conclusions have little connection with them. We can, however, use the materials collected by the author to test his and other theories, and see what conclusions that leads us to. That is what this article attempts to do.

The major threads in the author's theory are that technological gains passed on as lower prices increase the volume of product sold or reduce consumers' expenditures, and thus maintain employment, while gains turned over to employees or employers, with selling prices remaining unchanged, do not affect the total of buying power or the sales of the product, and therefore do not facilitate the reëmployment of the men displaced.

The data presented show not only what happened over industry as a whole, but also the variations in happenings and results in different industries. Contrasting one industry with another may shed some light on the relations between the diverse industry price, wage, and profit policies, and diverse results secured. The following analysis is conducted largely along that line.

Productivity and labor costs. The most significant single relation revealed by the data was that between changes in the physical volume of output per man-hour and changes in the wage cost per unit of product produced. This relation is shown in Figure 1, for the various industry groups or industries examined.[9] Despite a considerable fluctuation from industry to industry in wage rate changes, wage costs per unit of product still show a very consistent relation to changes in productivity, especially over the 1930's. Over the 1920's, 30 per cent increase in productivity was associated with about 20 to 25 per cent decline in wage costs per unit, in most cases, and 20 per cent increase in productivity, with about 12 per cent decline. Cotton textiles were a marked exception, with a material decline in wage cost despite little gain in productivity. Over the decade of the 1930's, the correlation was even closer. In this decade, a 60 per cent increase in productivity was associated with about 25 per cent decline in wage cost, and 15 per cent increase, with no decline in wage cost per unit. It is apparent that much more of the productivity gain was passed on in higher hourly wage rates in the 1930's than in the 1920's.

[8] The summary chapter (pages 167 and 173) does tabulate separately the changes from 1923-24 to 1928-29, but practically no use is made of them in reaching the conclusions.

[9] The data for these and subsequent charts are summarized in Appendix Table A.

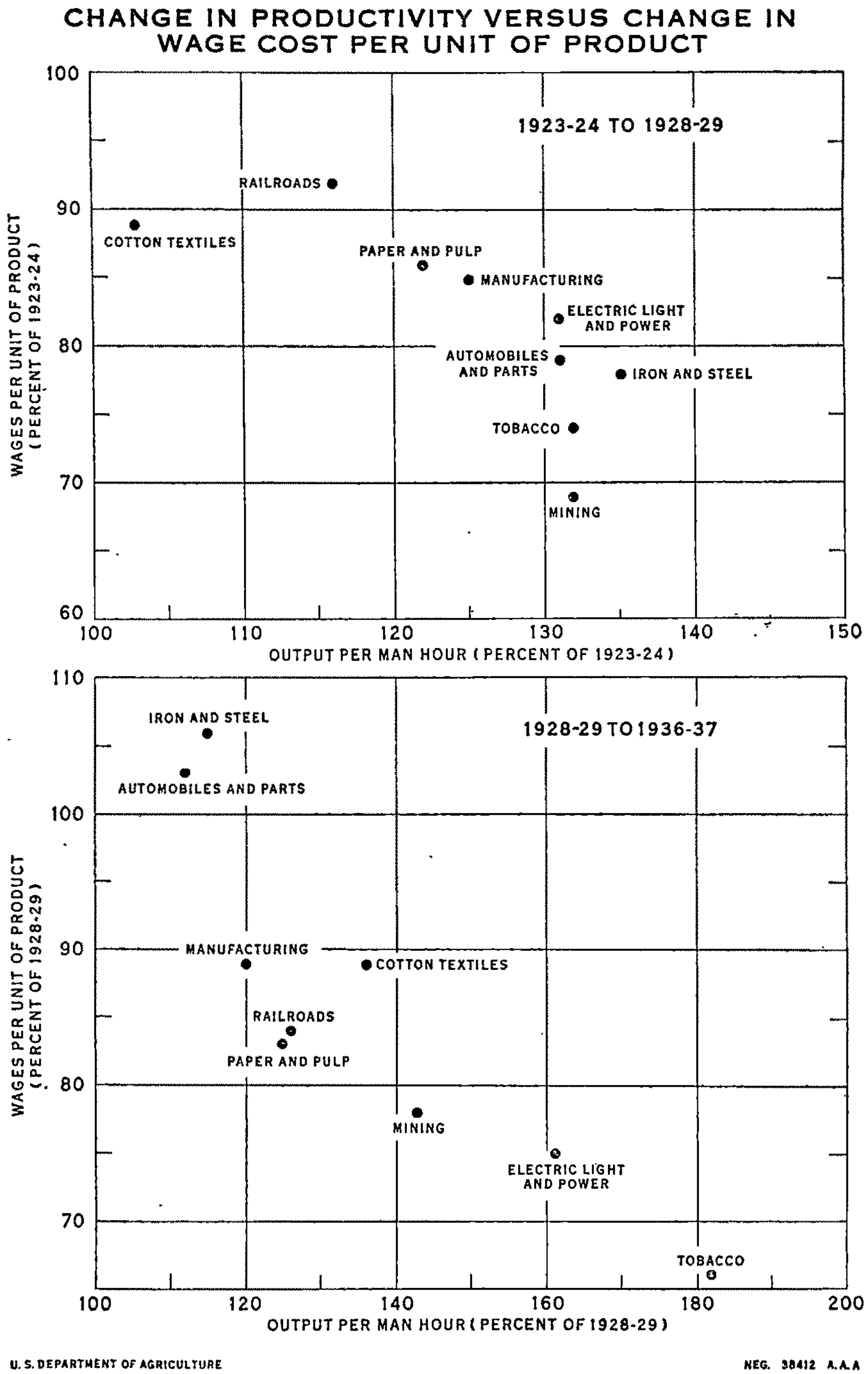
CHANGE IN PRODUCTIVITY VERSUS CHANGE IN WAGE COST PER UNIT OF PRODUCT
1923-24 TO 1928-29
WAGES PER UNIT OF PRODUCT (PERCENT OF 1923-24)
OUTPUT PER MAN HOUR (PERCENT OF 1923-24)
RAILROADS
COTTON TEXTILES
PAPER AND PULP
MANUFACTURING
ELECTRIC LIGHT AND POWER
AUTOMOBILES AND PARTS
IRON AND STEEL
TOBACCO
MINING
1928-29 TO 1936-37
WAGES PER UNIT OF PRODUCT (PERCENT OF 1928-29)
OUTPUT PER MAN HOUR (PERCENT OF 1928-29)
IRON AND STEEL
AUTOMOBILES AND PARTS
MANUFACTURING
COTTON TEXTILES
RAILROADS
PAPER AND PULP
MINING
ELECTRIC LIGHT AND POWER
TOBACCO
U. S. DEPARTMENT OF AGRICULTURE
NEG. 38412 A.A.A

FIG. 1

Productivity and capital costs. It is sometimes claimed that increases in output per worker reflect increased quantities of capital per worker, and that reductions in labor costs per unit must be offset by increases in capital costs per unit of product.[10] If this is so, we should expect to find an inverse relation between labor costs per unit of product and capital charges per unit of product. When the data[11] are examined from this point of view, no relation whatever is found between changes in labor productivity and in charges for capital. Capital costs per unit of product were generally 10 to 20 per cent higher in 1928-29 than in 1923-24, only cotton textiles and autos showing any reduction.[12] In 1936-37, they were lower, usually by 20 to 30 per cent, than in 1928-29. The differences from industry to industry, however, showed no relation to differences in output per man-hour. Thus railroads, which increased productivity only 16 per cent over the 1920's, increased capital costs per unit of output by exactly the same percentage as did tobacco, which increased productivity 32 per cent in the same period. Similarly, over the 1930's, electricity and paper each reduced capital charges per unit by about the same extent, despite the fact that the increase in productivity was more than twice as great in electricity as in paper.

Productivity and gains to consumers. How far should productivity increases be passed on to consumers, in lower prices, and how far should they be passed on to workers or employers, and in what way? This is the great central problem on which the book attempts to throw some light. Industry by industry, there is a fairly marked relation between changes in service rendered consumers per dollar of expenditure, and changes in technology. "Service rendered consumers per dollar of expenditure" is used to express the text's concept of charges, per unit of goods, made for the labor and capital employed in the industry, after deducting all other costs, including materials, fuel, transportation, taxes, and depreciation.[13] The relation between productivity and charges to consumers is shown in Figure 2.

While increased productivity is usually a prerequisite for reduced charges to consumers, apparently it does not follow that increased productivity is always or uniformly passed on to consumers. With the single exception of cotton textiles over the 1920's, only those industries with large gains in technology made material increases in service rendered per dollar. In each case, however, there were some industries with large productivity gains (tobacco and electricity in the 1920's, and cotton, mining, and automobiles in in the 1930's), which passed on much less to consumers than did other industries with corresponding gains in productivity.

[10] Thus Bell says (p. 45), "It is largely through the process of investment that increasing industrial efficiency and expansion of production occur."

[11] See Appendix Table A.

[12] The fact that capital charges were higher does not necessarily mean that income paid out to owners of capital was also higher, as will be shown below.

[13] Text, pp. 25-26, 190-200.

CHANGE IN PRODUCTIVITY VERSUS CHANGE IN SERVICE RENDERED CONSUMERS PER DOLLAR

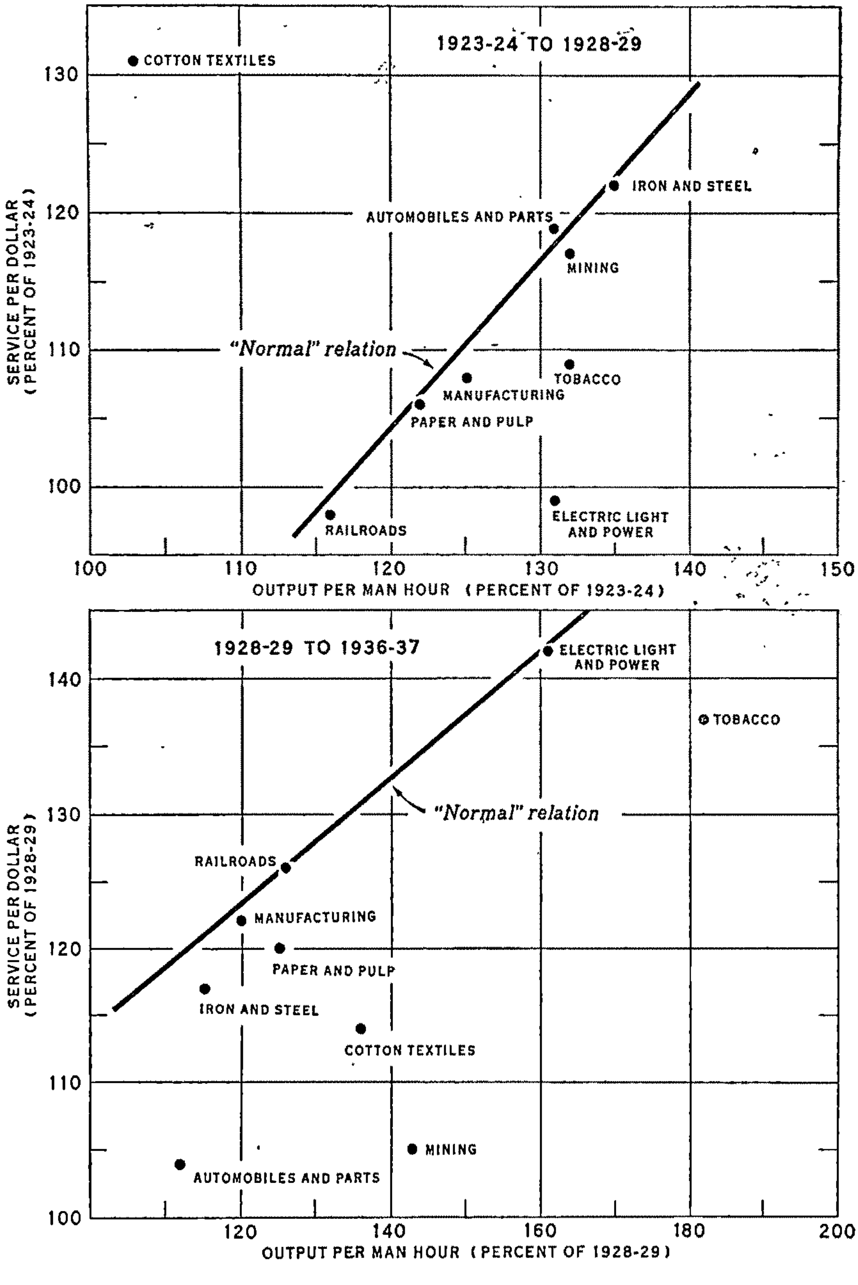

FIG. 2

The proportion of the productivity gain passed on differed sharply over the two decades. The "normal" amount passed on by the industries passing the largest proportion, for a given gain in productivity, was as follows:

Per cent gain in productivity	*Per cent gain in service to consumers*	
	1920 decade	*1930 decade*
20	4	23
30	16	28
35	22	30
60	—	42

The ratio of the gain in consumers' service to the gain in productivity for the best industries, was two-thirds to all in the 1930's, while in the 1920's it was generally half or less.[14] To the extent that passing productivity gains on to consumers maintains employment, then, we should expect to find employment better maintained in the 1930's than in the 1920's. (The lines of the "normal" relation are obviously not regular regression lines. Instead, they are fitted by eye to the *top* of the data—excluding the unusual cotton textile case in the 1920's. The lines thus represent the *maximum* observed increased in service to consumers, for any given increase in productivity.)

Prices and gains to consumers. Consumers' buying power is influenced by actual prices charged, regardless of whether those prices go to cover raw materials purchased, labor and manufacturing costs, or transportation or selling expenses. The data on "service to consumers" presented above relate only to income retained by the manufacturer for remunerating labor or capital. Wholesale prices, which impinge on the purchaser, are only partially correlated with income retained, and hence do not reflect changes in productivity as closely as do the industries' charges alone. When wholesale price changes are plotted against productivity changes (note Figure 3), the correlation is much less marked than it was in Figure 2. The correlation is very slight, indeed, especially in the 1920's. While changes in "income received for the services of labor and capital" may be a very sensitive way of measuring funds retained by an industry, it appears to be only a rough indication of prices actually charged consumers, even when measured at wholesale. Changes in raw material and other costs outside the industry, and in capital costs, largely blot out the effect of changes in labor efficiency within the industry. The fairly close initial correlation between productivity and labor costs per unit (Figure 1) thus almost disappears by the time it gets through to wholesale prices (Figure 3).

Prices and consumption. The argument that gains in productivity best stimulate employment when passed on to consumers rests in part on the assumption that price is influential in determining consumption. How far did changes in prices affect volume of output over the period studied? Again

[14] As is shown subsequently, even when all the gain is passed on to consumers, service rendered per dollar would not rise by as large a per cent as labor output per hour.

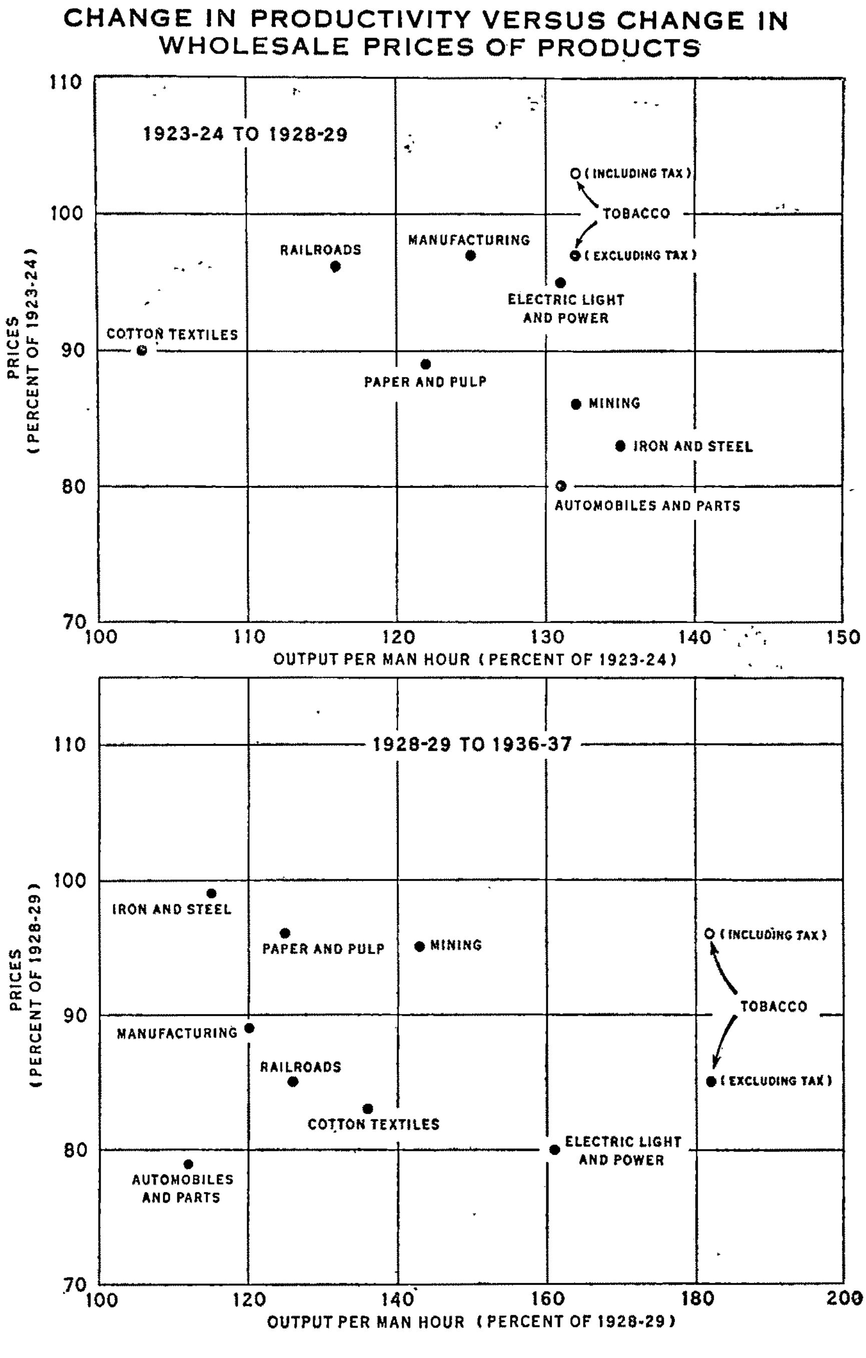
CHANGE IN PRODUCTIVITY VERSUS CHANGE IN WHOLESALE PRICES OF PRODUCTS
1923-24 TO 1928-29
PRICES (PERCENT OF 1923-24)
OUTPUT PER MAN HOUR (PERCENT OF 1923-24)
(INCLUDING TAX)
TOBACCO
(EXCLUDING TAX)
RAILROADS
MANUFACTURING
ELECTRIC LIGHT AND POWER
COTTON TEXTILES
PAPER AND PULP
MINING
IRON AND STEEL
AUTOMOBILES AND PARTS
1928-29 TO 1936-37
PRICES (PERCENT OF 1928-29)
OUTPUT PER MAN HOUR (PERCENT OF 1928-29)
IRON AND STEEL
PAPER AND PULP
MINING
(INCLUDING TAX)
TOBACCO
(EXCLUDING TAX)
MANUFACTURING
RAILROADS
COTTON TEXTILES
ELECTRIC LIGHT AND POWER
AUTOMOBILES AND PARTS
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FIG. 3

using wholesale prices as an approximation to the retail prices which consumers actually pay, Figure 4 presents the pertinent facts.

Over the decade of the 1920's, there was a marked relation between price change and quantity produced. Only electricity, affected by a marked upward trend in demand, departed from the rule, and showed a large increase in output with little decline in price. The average response of demand over this period, as indicated by the industries falling in each group, was roughly as follows:

Railways, cotton, mining, tobacco—
  Average reduction in price, 6 per cent
  Average expansion in output, 8 per cent
Paper, steel—
  Average reduction in price, 14 per cent
  Average expansion in output, 32 per cent
Automobiles—
  Reduction in price, 20 per cent
  Expansion in output, 50 per cent

Over the 1930's, however, there was a less close relationship between price and production changes. One group of industries held their prices within 5 per cent of 1928-29 levels, yet varied in sales between a 5 per cent loss and a 15 per cent gain. Another group cut charges 15 to 20 per cent, yet varied even more widely in production, with long-time industry trends (in railways and electricity) apparently dominating over price responses. While the data for the 1920's lend some support to the thesis that industries which reduce price the most maintain best or increase employment, the data for the 1930's provide very little.

It is obvious that Figure 4 gives only a very crude measure of the effect of price consumption. Many other factors besides price are involved—prices of competitive or substitute products, level of industrial activity, trends in demands. Multiple correlation techniques are therefore necessary to get any precise measure of the elasticity of demand. All that this comparison gives is the over-all relation between price and production changes, without refining the analysis to hold constant or eliminate the other variables present.

Conclusion with respect to the way the productivity gains are passed on. The evidence to this point shows that labor costs per unit do change with productivity, and that in the 1920's at least, industry demand did respond to price changes. The data also show, however, that the connection between unit labor costs and prices is exceedingly attenuated, with changes in labor costs per unit largely obscured by capital charges which are not correlated with productivity, and by raw material price and other changes which lie outside the given industry. While increased output per man hour is usually *necessary* to increase service rendered consumers per dollar, some industries which increased productivity greatly did not increase service to consumers correspondingly.

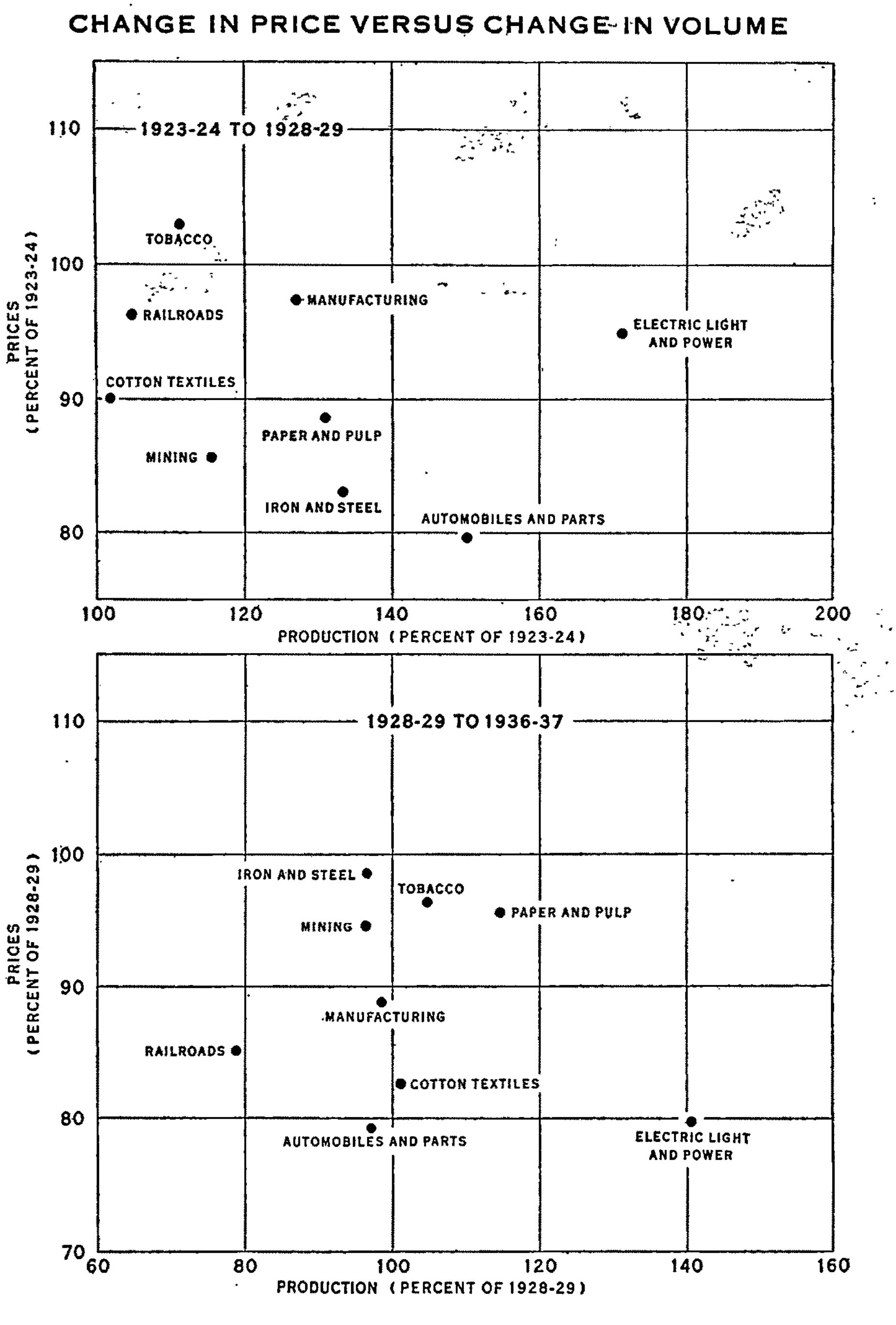
CHANGE IN PRICE VERSUS CHANGE IN VOLUME
1923-24 TO 1928-29
PRICES (PERCENT OF 1923-24)
PRODUCTION (PERCENT OF 1923-24)
110
100
90
80
100
120
140
160
180
200
TOBACCO
RAILROADS
MANUFACTURING
ELECTRIC LIGHT AND POWER
COTTON TEXTILES
PAPER AND PULP
MINING
IRON AND STEEL
AUTOMOBILES AND PARTS
1928-29 TO 1936-37
PRICES (PERCENT OF 1928-29)
PRODUCTION (PERCENT OF 1928-29)
110
100
90
80
70
60
80
100
120
140
160
IRON AND STEEL
TOBACCO
PAPER AND PULP
MINING
MANUFACTURING
RAILROADS
COTTON TEXTILES
AUTOMOBILES AND PARTS
ELECTRIC LIGHT AND POWER
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FIG. 4

Furthermore, a much larger share of productivity gains was passed on as increased industry services to consumers in the 1930's than in the 1920's. On the other hand, increased productivity was used very little to increase wage rates in the 1920's, but was used materially to increase them in the 1930's. The 1920's, then, saw relatively little gain for either consumers or workers from productivity increases, while the 1930's saw material gains for both groups. This combination of circumstances, in conjunction with the heavy unemployment of the 1930's, throws little light on Bell's thesis that diversion of productivity to wage rates reduces employment, but diversion to lower prices sustains it.

Distribution of gains of technology among workers, owners, and consumers. The increase in output per man-hour creates a technological gain which can be directed, in part or in whole, along three alternative paths:

(1) It might all be used to increase pay per hour, in return for the increased output per hour. In that case, if other costs per unit remained unchanged, wage rates would rise in the same proportion as productivity increased.

(2) It might be used to increase profits by diverting all of the reduced costs of labor per unit of output to larger profits. Since capital in most industries receives less than half of the net income disbursed, this would usually increase profits by a larger per cent than the full diversion to workers would increase hourly wage rates.

(3) It might all be used to increase the service rendered to consumers by the industry for each dollar of income received. Since labor is not the only cost involved, the service rendered to consumers could not be increased proportionately as much as could hourly wage rates by the full diversion to workers.

The text makes several different attempts to measure the way in which productivity gains are distributed among the three factors.[15] None of these attempts leads to any very clear-cut conclusions. A simple summary of the way productivity gains are distributed among the three factors is given in Table 1 below. This table follows Bell in using only the high points, 1923-24, 1928-29, and 1936-37. It separates the developments in two decades, showing first the changes from 1923-24 to 1928-29, to represent the 1920's, and then the changes from 1928-29 to 1936-37 to represent the 1930's. Gains to workers are based upon changes in rates of pay per hour. Gains to capital are based upon changes in profits per dollar of capital invested.[16] (Of course, the reported dollars of capital on the books is only a very crude and approximate measure of the amount of capital actually utilized. Also

[15] Especially in Appendix G, pp. 315-335.

[16] Following the data in the book, this is based on fixed capital for the individual industries, and on total capital for the 3 groups, manufacturing, railroads, and electricity. Capital data for tobacco were estimated by the present author from reports of the large concerns.

there is the question whether capital returns, like labor returns, should not be computed *per hour at work*. Enforced leisure may have little more alternative use-value to partially employed workers than idle plant has to its owners.) Gains to consumers are based upon changes in service rendered to consumers per dollar expended, computed by the same method as used by Bell, as explained in connection with Figure 2. Thus computed, the relative increase in disbursement rate to each factor is as follows:

TABLE 1

GAIN IN DISBURSEMENTS TO EACH FACTOR, AS COMPARED TO PREVIOUS REWARD

Industry	(Per cent) 1923–24 to 1928–29			1928–29 to 1936–37		
	Workers	Owners	Consumers	Workers	Owners	Consumers
Manufacturing	6	8	8	7	−15	22
Railroads	6	15	−2	6	−40	26
Electric light and power	8	10	−1	21	−14	42
Automobiles	3	20	18	16	22	4
Iron and steel	6	46	22	22	−34	17
Paper and pulp	4	[1]	6	4	[1]	20
Cotton textiles[2]	−9	−67	31	21	32	14
Tobacco	−2	21	9	19	−10	36
Mining	−9	[1]	[1]	11	[1]	[1]

[1] Data not available.
[2] Changes for first decade based on 1922-23, for cotton textiles.

The distribution of gains, as shown in Table 1, was sharply different in the two decades. In the 1920's, the lion's share pretty consistently went to owners, while consumers and labor shared the balance. (Cotton textiles were an exception, with consumers gaining greatly at the expense of the other two groups.) Over the 1930's, on the contrary, consumers generally received all or more than their share (as contrasted to the peak years 1928-29), capital mostly gained less than nothing, while workers in automobiles, steel, and cotton profited handsomely, but elsewhere received only a moderate share of the gains.

The distribution of the gains was somewhat related to specific industrial characteristics. The utilities, rail and electricity, put the major part of their gains into profits in the 1920's, and passed none on to consumers. In the 1930's, consumers came in for their share, while capital was sharply reduced. The highly centralized industries, automobiles, steel and tobacco, gave the lion's share to capital and consumers in the 1920's, with little or none to workers. In the 1930's, workers and consumers were sharply increased, while returns to capital shrank (except in automobiles, where consumers came off third best). The more competitive industries, as

sparsely represented by paper and pulp, and cotton textiles, passed a large part or all of the benefits to consumers in both decades. (The erratic shifts in cotton were due to the changes from the high prosperity years of 1922 and 1923 to much more modest earnings thereafter.) Similar information on a broader sample of competitive industries would provide a firmer basis to know whether these differences in behavior from those of regulated or monopolistically competitive industries are accidental or representative. Over both decades, steel and cotton textiles were most consistent in passing on to consumers a large share of the gains. Yet these industries differed widely in their rate of growth, while the utilities, which passed on to consumers none of their productivity gains in the 1920's, and all of them in the 1930's, grew more rapidly in the 1920's than in the 1930's. Here as before, there is little direct evidence to support the thesis that passing on all the gain to consumers is the royal road to full employment.

Distribution of income and national buying power. As indicated earlier, the text disregards entirely all problems concerned with the differential uses made of income paid various income groups. More than that, it lumps together, as one and the same thing, income actually disbursed to owners of capital, as dividends, interest, or rent, and profits retained unspent as corporate savings, with no recognition of their different impact on the economy. The significance of this over the two decades may be seen by the following comparisons for the three great industry groups.

These data show that over the 1920's, the proportion of income payments which went to labor declined sharply in each major group, while the portion

TABLE 2

DISBURSEMENTS TO CAPITAL AND LABOR, IN PER CENT OF INCOME RETAINED BY THE INDUSTRY AFTER PAYING EXTERNAL COSTS

		Distribution of income		Capital payments		
		Paid to labor	"Paid" to capital[1]	Actually paid out	Business savings	Per cent of total actually paid out
Manufacturing:	1923–24	74.5	25.5	19.6	5.9	94.1
	1928–29	70.9	29.1	23.7	5.4	94.6
	1936–37	75.3	24.7	23.7	1.0	99.0
Railroad utilities:	1923–24	69.0	31.0	25.1	5.9	94.1
	1928–29	63.4	36.6	28.1	8.5	91.5
	1936–37	67.6	32.4	33.7	−1.3	101.3
Electricity:	1923–24	41.3	58.7	—	—	—
	1928–29	33.6	66.4	61.3	5.1	94.9
	1936–37	35.9	64.1	56.8	7.3	92.7

[1] Includes dividends, business savings, interest, and rent.

set aside for capital increased. These increased capital payments were used partly for increased dividend and other actual payments to capital owners, and partly for increased corporate savings. The diversion of an increased proportion of income to those who receive income from capital of course increased the tendencies to saving and hoarding in the economy.

What happened in these peak years of prosperity is not, of course, the whole story. Corporate surpluses were drawn on heavily to maintain dividends, and sometimes even wages, during the bad years of the depression. Yet the fact remains that in the high-prosperity period of 1923-24, and again in 1928-29, American business habitually paid out 95 per cent or less of the income that was available for disbursement, and retained 5 per cent or more for its own purposes. This would not be so serious if the funds retained were being spent for plant, equipment, or in other ways that maintained the demands for goods and services. The Brookings Institution itself, however, has shown that the volume of new capital formed has little relation to the volume of funds available for investment.[17] The author may have felt that this phase of the problem was outside the scope of his investigation. Had he attempted to consider it, he might have found here one clue to why, in each period of business boom, production outran sales to such a marked degree.

The record as a whole thus indicates that during the 1920's, a rising proportion of the gains of technology was diverted to capital, rather than passed on either to workers or consumers. Furthermore, it shows that a considerable proportion of the profits was not even paid out to owners, but was withheld, presumably largely idle, in corporate reserves. In the 1930's a reverse movement occurred, with productivity gains passed on more fully to consumers and workers, and with capital accepting lower returns. Lower prices *and* higher wages occurred simultaneously. The industries that put more emphasis on lower prices showed little greater expansions in output in the 1930's than those which put the emphasis on higher wages.

These facts offer little support to the author's conclusions that lower prices, rather than higher wages, provide the road to maintained employment. He may be right—but not because of the facts he has brought together.

Little attention has been given here to the changes in numbers of men employed, weekly or annual earnings, or the real income of workers.[18] All of these are fully presented in Bell's book. In general, however, they throw little further light on the fundamental problem of how productivity gains might best be distributed. Once wage rates per hour are decided

[17] Harold G. Moulton, *The Formation of Capital,* chap. x, and *Income and Economic Progress,* pp. 40-45.

[18] A recent article on "Union Wage and Hour Policies and Unemployment" by Waldo E. Fisher in the *American Economic Review,* vol. xxx, pp. 290-299, June, 1940, summarizes some of these inter-relationships.

upon, reductions in hours per week merely serve to spread employment. Only if the wider effects on the distribution of income, on savings, and on relief expenditures are taken into account, do new economic problems arise—and Bell makes no attempt to consider these wider repercussions in his analysis.[19]

Neither Bell's analysis, nor this restatement, attempts to determine or explain *why* business-men have followed the price, wage, and production policies which they have followed. Neither analysis attempts to explore how various changes in the social environment might modify the way entrepreneurs have reacted. On the contrary, the analysis is limited to the narrower issues of determining (1) what changes have taken place in physical output per man-hour, and what changes in prices, wages, production and employment have accompanied the changes in output; and (2) what has been the relation of the wage and price policies followed to the volumes of production and employment. *Why* the policies have prevailed that did prevail, *how* other policies might be substituted for them, and *what* the results would have been if other policies had been followed instead, involve much broader problems which lie outside the field that has been considered here.

Much of the theoretical discussion of wages and employment has been in purely static terms. The dynamic problem is how wages, prices, and profits should be readjusted as productivity increases, to best maintain or expand employment. This dynamic problem has had little attention from the theorists. For these reasons the statistical results of Bell's investigation cannot be compared directly with prior theoretical expectations. On the contrary, it is to be hoped that the availability of this new body of factual information will stimulate theoreticians to deeper and more incisive examination of the dynamic problem, in all its realistic complexities.

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[19] It might be argued that wage rate changes have come out of the effort to reduce weekly hours, as a result of pressures to reduce hours and still maintain weekly incomes. In such cases, it would be pertinent to ask whether the higher wage rates had, or had not, reduced hours of employment provided. But that simply raises again the original issue—do high wage rates cause unemployment?

APPENDIX TABLE A

BASIC DATA FOR CHARTS

Industry or group	Labor productivity per hour	Wage cost per unit of product	Capital cost per unit of product	Service rendered consumers per dollar of income	Wholesale prices	Quantity of product produced
	1928–29 average in per cent of the 1923–24 average					
Groups:						
Manufacturing	125	85	105	108	97	127
Railroads	116	92	121	98	96[5]	105
Electric light and power	131	82	114	99	95	171
Mining	132	69	[1]	117	86	106
Industries:						
Automobiles and parts	131	79	96	119	80	150
Iron and steel	135	78	113	122	83	133
Paper and pulp	122	86	115	106	89	131
Cotton textiles[2]	103	89	30	131	90	102
Tobacco	132	74	121	109	97[3] 103[4]	111
	1936–37 average in per cent of the 1928–29 average					
Groups:						
Manufacturing	120	89	70	122	89	99
Railroads	126	84	70	126	85[5]	79
Electric light and power	161	75	68	142	80	141
Mining	143	78	[1]	105	95	96
Industries:						
Automobiles and parts	112	103	87	104	79	97
Iron and steel	115	106	56	117	99	97
Paper and pulp	125	83	72	120	96	115
Cotton textiles	136	89	102	114	83	101
Tobacco	182	66	84	137	85[3] 96[4]	105

[1] Not available.
[2] 1928–29 average in per cent of 1922–23 average.
[3] Excluding excise tax on tobacco products.
[4] Including excise tax on tobacco products.
[5] Weighted passenger and ton mile.

Computed from data in appendix tables of *Productivity, Wages, and National Income*, by Spurgeon Bell.

WAR AND THE PATTERN OF BUSINESS CYCLES

The economic disturbances initiated by war lead to distinct patterns in business cycles. Until shortages restrict output, war demand leads to expansion in belligerent countries. In neutral countries, the early part of a war is conducive to expansion, the latter part to contraction, in production. Immediately after a war business declines because of the reduction in war expenditure. Revival follows when markets are opened and investment is resumed. The level of business in the first decade after a great war depends upon foreign exchange policy. In the second decade, a general return to the gold standard may put pressure on reserves and lead to world-wide deflation. Although it is probably not the cause of long waves, war may contribute to the termination of the upswing and may add to the difficulties of the downswing of the long waves.

I

It has generally been recognized that war must interrupt the course of business and bring about large fluctuations of the same type as business cycles. The economists of the last century emphasized the significance of crises, and in explaining them frequently sought the cause in particular events, among which war was invariably included. Typical of these is the observation of Jevons that the increased pressure in the money market, leading to crises, is largely caused by abnormal changes in the demand for money. "These changes," he wrote, "arise from deficient harvests, from sudden changes of supply or demand in any of our great staple commodities, from manias of excessive investment or speculation, from wars and political disturbances, or other fortuitous occurrences which we cannot calculate upon and allow for."[1]

Occasionally, some of the economists of the last century gave extensive consideration to war as a major factor in business fluctuations. This was particularly true in the period following the Napoleonic Wars. In the one chapter of his *Principles* in which he considered the disturbances to business having their origin in "sudden changes in the channels of trade," David Ricardo frequently illustrates his points by referring to the changes necessitated by war. And Thomas Tooke, whose *History of Prices* is to a large extent a history of business cycles, devoted a part of his work to the effects of war on prices, and on the demand for and supply of commodities.[2]

Despite the recognition of the significance of war in business fluctuations, little attention has been given to the precise pattern of business cycles brought about by war. It seems almost inevitable that some such

[1] W. S. Jevons, *Investigations in Currency and Finance,* 2nd ed., p. 170. *Cf.* Lord Overstone, *Tracts on Metallic and Paper Currency,* p. [352], where the difficulties of the first twelve years of the Bank Charter act are largely attributed to war and post-war conditions. W. C. Mitchell, *Business Cycles, the Problem and Its Setting,* p. 3, states that "serious efforts to explain business crises and depressions began amid the violent fluctuations in trade which followed the Napoleonic Wars."

[2] D. Ricardo, *Principles of Political Economy and Taxation,* chap. xix; Thomas Tooke, *A History of Prices and of the State of the Circulation,* vol. i, part ii. Some of the observations of Ricardo and Tooke will be noted below.

pattern should exist. Modern war involves all of the productive resources of great nations, and it must have a tremendous effect on the course of business among the belligerents and among those neutrals having economic and financial relations with the countries at war. Every aspect of the economic life of these countries, belligerent and neutral, is affected by war: production and consumption, money and prices and interest rates, public finance and the distribution of income. Nor is the effect of war on business confined to the period of hostilities. For years afterward the pattern of business fluctuations is dominated by conditions altered by war.

II

The outbreak of war, particularly if no preparation has been made to convert a country from a peace to a war basis, may bring temporary depression.[3] Such an interruption of business seems to occur in nearly all major wars. The beginning of the Civil War in the United States, the Franco-Prussian War, and of other great wars was accompanied by a recession or depression in business. In the spring and summer preceding the outbreak of war in 1914, business was moderately depressed in all countries. Following the declaration of war, mild depression became deeper in England, growing depression was followed by almost complete suspension of business in France, and even in Germany the conversion from peace to war was accompanied by some unemployment. Because industries in the belligerent countries were already on a war or near-war basis, adjustment seems to have been more rapid in the current war. Nevertheless, it is worth noting that employment in England in the first four months of the war was somewhat below the period before the war.[4]

Once the adjustment from peace to war is made, a period of tremendous industrial activity, war activity, begins. This activity is greatest in the fields directly related to the production of arms and munitions, the primary war goods, and the metals and chemicals required for their manufacture. Other industries providing fuel and transportation equipment may also feel the expansion in demand for war purposes. This high level of activity is invariably maintained in the primary war industries throughout the war.

If the productive resources of a country are not strained in the production of primary war goods, there may be a general expansion in business. The increased employment and income in the war industries will lead to a

[3] Ricardo observed that "the commencement of war after a long peace, . . . generally produces considerable distress in trade." D. Ricardo, *Principles of Political Economy and Taxation,* chap. xix, p. 250 (Gonner ed.).

[4] *The Guaranty Survey,* vol. xix, no. 10, Jan. 29, 1940, p. 11, contains the following statement in its analysis of economic conditions in Great Britain: "General employment has risen further. The number of registered unemployed persons dropped 41,063 between November 13 and December 11 to 1,361,525, but remained 130,000 above the last pre-war figure."

greater demand for many types of consumption goods, and provide a stimulus for greater investment. With labor and raw materials available for expanded production, an industrial boom is possible. The expansion in England in 1915, and in the United States in 1917 and 1918 was not confined to the war industries.

However, a general expansion of business is very unlikely to be maintained for long in belligerent countries during a great war. The depletion of the labor supply for military service can be made good only in part by the employment of idle labor, young people and women, and the retention of superannuated workers. Further, blockade or shortage of foreign exchange may deprive warring countries of necessary raw materials from abroad, or may prevent the continuation of exports to foreign markets.[5] Inadequate transportation facilities and fuel supply may also prevent the maintenance of a high level of production throughout a great war.

One other major factor limiting the production of goods in time of war may be noted. Because war needs are given precedence in production, an extended war is generally accompanied by a tremendous depletion of industrial equipment and a decline in the output of consumption goods.[6] This depletion of capital equipment may result from the systematic denial of investment goods to private industry, either through limitation of their purchases of such goods or by restricting their flotation of securities for new capital and their access to bank credit.[7] When the capital equipment of a belligerent country has been impaired by lack of additions, replacements, and maintenance, the volume of production is certain to decline.

Because of the many factors—labor, raw materials, markets, capital equipment, transportation, fuel—that are necessary to maintain a high level of production, a shortage in any one of which is certain to limit output, a major war is unlikely to permit a general expansion of production in belligerent countries for long, despite the fact that the demand for goods is at a higher level than in time of peace.

It is sometimes denied that the demand for goods is in fact increased by

[5] Jevons noted that "during the Russian [Crimean] war, the prices of hemp, flax, and tallow rose much above their natural level." Presumably, the supplies of these goods were diminished by war. W. S. Jevons, *Investigations in Currency and Finance*, 2nd ed., p. 23.

Ricardo noted that "the effects of war may so raise the freight and insurance on its conveyance, that it can no longer enter into competition with the home manufacture of the country to which it was before exported." D. Ricardo, *Principles of Political Economy and Taxation*, p. 248 (Gonner ed.).

[6] Tooke said: "It will be readily admitted, that the immediate and obvious tendency of a state of war is to abstract a portion of the capital and labour, which would otherwise have been employed in reproduction." He noted, however, that during the Napoleonic Wars in England, there "was an increase of production and population in spite of the opposite tendency arising out of a state of war." Thomas Tooke, *A History of Prices and of the State of the Circulation*, vol. i, pp. 114, 116.

[7] See the article "War Economics," by Alvin Johnson, *Encyclopedia of the Social Sciences*, vol. xv, pp. 342-347.

war. Admittedly, prevailing methods of war finance increase tremendously the volume of monetary expenditure; but the reason for this apparent increase in demand is the financial policy pursued in time of war. According to this view, if wartime expenditure were financed by taxation and by the borrowing of savings, there could not be an increase of demand. "It is perfectly demonstrable," wrote Tooke, "that an expenditure by government, whether defrayed by immediate taxes to the whole amount, or by loan on the anticipation of taxes to be levied, is nothing but a change in the mode of laying out the same sum of money; and that what is expended by government would and must have been laid out by individuals upon objects of consumption, productive or unproductive." Nor, according to this view, does government expenditure financed by loans from savers have any expansive effect. "The money advanced to government would, but for such loan, have been laid out equally in purchases, though probably not of the same commodities, or would have been lent on private securities to such persons as would have laid it out in purchases."[8]

This view that war-time demand is merely a transfer of ordinary demand is untenable. Taxation and borrowing by government does not diminish the expenditure of the public by the full amount of the payments to the government. The whole level of demand, the propensity to consume, is raised by war.[9] And if the volume of consumption is increased by war, the inducement that business-men have for expanding investment is also increased. Although other factors, limiting the productive capacity of the community, or restricting consumption and investment, may prevent an expansion of output, the demand justifying a higher level of industrial activity is created by war.

The following summary of business conditions in England and Germany from 1914 to 1918 reveals the major factors affecting business in belligerent countries in time of war.[10]

England: 1914, mild depression deepens with war. Slow decline and dullness; severe paralysis with war.

1915, war activity. Industrial boom with shortage of labor.

[8] Thomas Tooke, *A History of Prices and of the State of the Circulation,* vol. i, pp. 92, 95.

[9] "When war breaks out people do not merely want soldiers' work and shells and guns instead of other things: they do not merely want to get these things by transferring effort to making them away from making other things: they also want to enhance the supply of them by increasing the aggregate sum of effort, and by increasing this in an enormous degree. In these circumstances there must be an enormous expansion of industrial activity all round. This expansion is, of course, much larger than appears in unemployment statistics, because a very large number of persons hitherto not engaged in industry are drawn into it. The activity of soldiering should, of course, be counted for this purpose as an industry." A. C. Pigou, *Industrial Fluctuations,* pp. 48-49.

[10] This summary of business conditions is abstracted from Willard Thorp's *Business Annals.*

1916, war activity. Great activity in war industries; large profits; labor shortage and shipping difficulties.

1917, war activity. Continued activity with increased government restrictions; raw material and labor shortage.

1918, war activity. Continued activity with greater government control; severe raw material shortage.

Germany: 1914, mild depression, revival. Continued dullness and increased unemployment; severe industrial disturbance gives way to great activity in October.

1915, war activity. Great activity and readjustment to war demands; diminishing unemployment.

1916, war activity. Continued feverish activity with increasing government control; raw material and labor scarcity.

1917, war activity. Further extension of government control; increasing scarcity of raw materials.

1918, war activity; disorganization. Continued organization of industry for war purposes; labor troubles and raw material shortage.

III

The effect of war on business conditions in neutral countries is more difficult to determine. Unquestionably there are powerful forces leading to expansion of business in neutral countries. But other forces, more likely to appear late in the course of a great war, lead to a decline in business and to depression. It is likely that if the United States had not entered the World War in 1917, the depressive effects of that war would have begun to be felt in this country late in 1917 and throughout 1918.

The principal factor leading to an expansion of production in neutral countries is the increased demand for war goods from those belligerents whose domestic production is inadequate for the needs of a great war. To this must be added the demand for the raw materials used in the war industries. It is this type of demand that was an important factor in bringing about revival in the United States in 1915, and prosperity in 1916 and 1917. In the current war, the expansion of exports of this type has already begun. Beyond this expansion in the war industries, there may be an increased demand for goods ordinarily produced in sufficient quantities by the belligerent countries, but of which a deficiency appears in time of war. And there may be a demand from belligerents for goods formerly purchased from the enemy, and a demand from other neutrals for goods formerly purchased from belligerents. The sharp reduction in the German export trade between 1914 and 1918, and again in the current war, has already led to an expansion of foreign trade with those neutrals who depended on German supplies.[11] Finally, new enterprises may be undertaken

[11] Exports from the United States in December, 1939, were higher than for any December since 1929, and higher than for any month since March, 1930. The greater part of this increase represented sales to Great Britain and France. The exports to European neutrals, and to other parts of the world, including Latin America, were also increased.

to produce goods no longer available from belligerents. The dye and chemical industry in the United States was expanded to a considerable extent because of the difficulty of securing German products from 1914 to 1918. These are the major factors leading to a direct expansion in production and employment in neutral countries as a result of war conditions.

When the favorable factors enumerated predominate, a general expansion in business is likely in neutral countries. The increased income and expenditure of those employed in the export industries will lead to a greater level of consumption and will induce a greater volume of investment. Further, if the purchases of the belligerents are paid for in gold, credit conditions will become easier, and this will facilitate the maintenance of a still higher level of production and investment. The prosperity of the United States and of Sweden from 1915 to 1917 must be attributed in large part to their favorable situation for providing the goods demanded by belligerents and neutrals, and to the repercussionary effects of their enlarged exports and easier credit.[12]

The factors favorable to expansion in neutral countries do not continue throughout a prolonged war, and they may be partly or entirely offset by conditions leading to depression. For example, neutral countries may experience difficulty in securing the usual supply of raw materials from the belligerents. The best known instance is the cotton famine that resulted in depression in the English textile industry during the American Civil War.[13] Neutral countries may lose important markets because blockades or embargoes, or inadequate shipping facilities prevent the maintenance of normal trade relations. The United States suffered from such restrictions through the greater part of the Napoleonic Wars. Finally, belligerents may voluntarily restrict their imports of some goods to economize foreign exchange of transport equipment.[14] These unfavorable factors become particularly significant after two or three years of war, when foreign exchange reserves have been depleted, when shipping has been destroyed, and when blockades have become most effective. It should be noted that small neutrals within the war zone may find these unfavorable factors dominant from the very beginning of a war. The uneven prosperity and depression in the Netherlands from 1914 to 1918 must be attributed to the restrictive effects of these unfavorable factors.

The Guaranty Survey, vol. xix, no. 10, Jan. 29, 1940, p. 4. See also, "Recent Trends in U. S. Export Trade," *Survey of Current Business,* Jan., 1940, pp. 6-11.

[12] Exports were also encouraged by granting credits to belligerents. On the inflationary effects of such credits, see G. Cassel, *Money and Foreign Exchange after 1914,* pp. 17-18.

[13] The effects of the cotton famine are noted by W. S. Jevons, *Investigations in Currency and Finance,* 2nd ed., p. 23.

[14] Exports of American agricultural products to Great Britain and France have already declined, and the indications are that a further decline may be expected in the near future.

The following summary of business conditions in the United States, Sweden, and the Netherlands from 1914 to 1918 reveals the major factors affecting business in neutral countries in time of war.[15]

United States: 1914, depression. Conditions grow steadily worse until the war.
1915, revival; prosperity. Increased activity, beginning in industries manufacturing war materials; unemployment gradually disappears.
1916, prosperity. Great activity and expanding trade; active employment and wage increases.
1917, prosperity; war activity. Continued prosperity, with tremendous war activity after war is declared.

Sweden: 1914, recession; depression. Gradually increasing dullness turns to stagnation with war.
1915, revival; prosperity. Stagnation gradually yields to industrial boom; unemployment disappears.
1916, prosperity. Great activity in industry, hampered somewhat by increasing scarcity of raw materials.
1917, recession. Decrease in production due to scarcity of raw materials; unemployment appears; reduction of foreign trade.
1918, depression. Industry paralyzed by shortage of raw materials; severe unemployment; foreign trade restricted by blockade.

Netherlands: 1914, recession; panic; depression. Continued decline to war; complete interruption of business; severe restriction of foreign trade.
1915, revival; uneven prosperity. Extreme activity in war industries and necessities; further decline in foreign trade, due to navigation difficulties.
1916, moderate prosperity. Continued activity, curtailed by shortage of raw materials and restriction of foreign trade; fuller employment.
1917, recession. Activity severely hampered by coal shortage, lack of raw materials, and blockade; extensive unmeployment; very small foreign trade.
1918, depression. Industry and trade inactive; foreign trade completely stopped.

IV

The pattern of post-war business cycles is somewhat more complex than that of the war. For simplicity, post-war business conditions will be considered in two parts: the short-period consequences of the war, and the long-period consequences of the war.

The short-period pattern covers two business cycles. When the war is terminated, a recession occurs in the belligerent countries and in those neutrals depending on war orders. The major factor in the post-war decline is the halting of war expenditure.[16] "The cessation, by the peace, of all such extra demand, the great customer war being withdrawn (when by the

[15] This summary of business conditions is abstracted from Willard Thorp's *Business Annals.*

[16] "The shift from war to peace conditions involved rearrangements that almost wholly account for the short 'jolt' in 1918." J. A. Schumpeter, *Business Cycles,* vol. ii, p. 701.

"The commencement of . . . peace after a long war, generally produces considerable distress in trade. It changes in a great degree the nature of the employments to which the respective capitals of countries were before devoted." D. Ricardo, *Principles of Political Economy and Taxation,* p. 250 (Gonner, ed.).

stimulus of previous high prices there was a general increase of production) would naturally, it is supposed, account for falling markets and consequent distress among the producing classes, and for reduced wages and diminished consumption; these leading, through a long course of suffering, to the only remedy, *viz.*, a diminished production."[17] The typical post-war recession occurred after the Napoleonic Wars in England, after the Civil War in the United States, and throughout the world in 1918.

The first post-war depression ordinarily is soon followed by revival and prosperity. Old markets are reopened and industries expand to reëstablish their pre-war trade.[18] There is also certain to be a great demand for goods to replenish inventories used up during the war. A great investment boom is also likely to occur in the early post-war period. During the war there will have been a restriction of investment in construction and equipment. New investment will be necessary to make good the depreciation and the deficiency of the war period. In those areas in which war destruction was most marked, the field of new investment will be further enlarged by the need for reconstruction.[19] This post-war boom is generally terminated in two or three years, although traces of it may persist for a decade or more, depending on the destruction and investment deficiency from the war.

This short-period pattern of post-war business cycles, although commonly found among the belligerents and neutrals, may not prevail in the defeated countries. There, the post-war depression may continue longer, particularly as the war-time restrictions imposed by the victors may not be relaxed until the conclusion of a treaty of peace. Further, the breakdown of the economic system which may have preceded defeat, and political

[17] Thomas Tooke, *A History of Prices and of the State of the Circulation*, vol. i, pp. 91-92. It should be added that Tooke did not accept this doctrine but stated it for the purpose of revealing its fallacy. Nevertheless, it does describe the reasons for the first post-war decline.

[18] "An improvement of credit may have its rise in the opening out of foreign markets after a war." Alfred Marshall, *Money, Credit, and Commerce*, p. 249.

Mitchell notes the great expectations of English manufacturers and merchants after the Napoleonic Wars. "As Napoleon's fall drew near, English manufacturers and merchants, anticipating the reopening of hungry continental markets, accumulated large stores of goods for export. Waterloo was fought in June, 1815. There followed several months of brisk trade and optimistic speculation. But before the year was out it became clear that European consumers lacked the means to buy freely. Heavy consignments of British goods overstocked the markets and many of the consignors went bankrupt. The year after Waterloo was one of distress from beginning to end. Recovery began in the spring of 1817 and made rapid progress, so that 1818 showed great industrial activity." W. C. Mitchell, *Business Cycles, the Problem and Its Setting*, p. 4.

[19] "Physical destruction, reinforced by the accumulation of omitted replacements and investments, became the source of a reconstruction demand, not only in our three [United States, England, and Germany] or in all belligerent countries but also in others, which accentuated the prosperities and revivals that occurred up to, roughly, the middle twenties." J. A. Schumpeter, *Business Cycles*, vol. ii, p. 701. Schumpeter notes the peculiar conditions faced by England in the 1920's. These conditions are considered below in connection with the long-period pattern of post-war business cycles.

disturbances which may follow defeat, are certain to prevent the post-war revival and reconstruction from taking place quite as soon in the defeated as in the victorious countries. Thus, in Germany revival did not begin until 1921, the cycle of 1918 to 1920, common to nearly all other countries, being completely omitted.

The following summary of business conditions in the United States, England, and France from 1918 to 1920 reveals the nature of the short-period pattern of post-war business cycles.[20]

United States: 1918, war activity; recession. Continued activity; confusion with armistice; foreign trade expansion halted.
1919, revival; prosperity. Uncertainty gives way to extraordinary activity in the late spring; building revival; active foreign trade.
1920, prosperity; recession; depression. Great activity with a decline in the late spring; stagnation and severe unemployment in autumn and winter.

England: 1918, war activity; recession. Continued activity with greater government control; friction and confusion with armistice.
1919, revival; prosperity. Dullness gives way to boom; rapid industrial expansion; full employment.
1920, prosperity; recession; depression. Feverish activity gives way to steadily increasing depression; unemployment becomes severe in autumn.

France: 1918, war activity; stagnation. Continued activity hampered by scarcity of coal and raw materials; business and industry paralyzed last two months.
1919, depression; revival; boom. Severe though short depression; slow but accelerating revival sets in as reconstruction work is extended.
1920, prosperity; recession; depression. Activity and reconstruction; slump in summer; employment declines sharply late in year.

V

The long-period pattern of post-war business conditions depends largely on the monetary policy that belligerent and neutral countries follow during and after the war. A major war generally deranges the monetary system of belligerent countries and is generally accompanied by a sharp rise in prices even in neutral countries. The manner of transition of monetary policy from a war basis to a peace basis will determine the course of business in the decade or two after the war.

If a country whose currency has depreciated to a considerable extent on the foreign exchange market undertakes to maintain approximately the rate of exchange suitable to a level of prices and incomes conforming to the prevailing level, it is likely to escape any severe or extended period of depression in the first decade after the war. Thus, France, by maintaining exchange rates at approximately the level suitable to its prices and incomes, escaped any severe depression from 1921 to 1930. The business annals reveal that this was a decade of unusual prosperity in France.

[20] This summary of business conditions is abstracted from Willard Thorp's *Business Annals*.

However, if a country whose currency has depreciated on the foreign exchange market undertakes to stabilize exchange rates at the level prevailing before the war, it must face a long period of subnormal business activity during which the level of prices and incomes in the country is brought into equilibrium with that of other countries. This policy was followed by England, and the decade of the 1920's was one of considerable unemployment in that country. The same policy was followed by the United States after the Civil War, and the ten years from 1865 to 1874 were marked by depression, only three of these ten years being definitely prosperous. It is probable that much of the depression from 1815 to 1822 in the United States and England was caused by the policy of reëstablishing specie payments on the pre-war standard.

After a time, when exchange rates have been stabilized, countries that abandoned the gold standard because of the war may decide to return to gold. During the war the belligerent countries will have used a considerable part of their gold holdings to purchase goods in neutral countries. And prices will have risen in neutral countries, partly because of the war demand, partly because the inflowing gold will have been used to expand the volume of money and credit. When the gold standard is generally reestablished after a great war, it becomes necessary for the countries returning to gold to accumulate a reserve. The attempts to attract and accumulate gold may put a severe strain on monetary and credit facilities in all gold standard countries, and lead to world-wide deflation.[21] It is worth noting that the second decade after the Napoleonic Wars and after the World War were both marked by severe depression throughout the world.

This long-period pattern of post-war business cycles may be discussed in terms of the long-period interest rate, which reflects to some extent monetary policy. For various reasons, the long-period interest rate rises sharply in time of war, and continues to rise shortly after the war, when monetary policy is no longer specifically directed toward maintaining favorable conditions for government borrowing. During the post-war reconstruction boom the high interest rate need not be restrictive. But as time goes on, the high interest rate falls too slowly, partly because of the rigidity so characteristic of the long-period interest rate, partly because monetary policy designed to reëstablish the gold standard requires the maintenance of tight money. In the meantime, the high interest rate diminishes investment and depresses business for two reasons: first, the absolute magnitude of the interest rate makes some investment unprofit-

[21] Other monetary problems complicate still further the difficulties arising from a general return to the gold standard. Among these may be mentioned the problem of reparations payments, tariffs designed to facilitate a return to gold without too much deflation, and possibly the declining production of gold during the period of high war and post-war prices.

able that could have been undertaken at a lower interest rate; second, the slow fall in the interest rate induces some borrowers to postpone the issue of fixed interest securities in the expectation that the funds may be borrowed at lower cost in the future.

The long-period pattern of post-war business cycles is also affected to some extent by the changes in the direction of investment induced by war. The difficulty of acquiring the usual supply of industrial exports from countries at war frequently results in investment in new enterprises that cannot be maintained in profitable operation once the old sources resume production. And the older industrial countries are also likely to find the market for their exports less favorable than before the war.[22] The same difficulties occur in agriculture as well as in industry. To a large extent the agricultural problem of the last two decades had its origin in the expansion of production to meet the war demand and to replace the output of the areas taken out of cultivation during the World War. Ricardo noted the same agricultural problem in England after the Napoleonic Wars.[23]

Finally, brief consideration must be given to the question whether the long waves in business, noted by Kondratieff and others, are attributable to war.[24] These long waves are most apparent in the movement of wholesale prices, interest rates, and other monetary series; but they are evidently also to be found in some important production series. It has been noted by several writers that the period of falling prices (the downswing of the long wave) is accompanied by prolonged and severe depression.[25] If these long

[22] "In some countries," according to Schumpeter, "[the World] war demand had induced expansions which were clearly untenable under normal conditions." And he notes that "the war quickened industrial expansion, which it is reasonable to assume would have ensued anyhow in the course of time, and thus contributed to that decline of the position of Northwestern Europe in the world's economy, which in itself is not a war effect." J. A. Schumpeter, *Business Cycles,* vol. ii, pp. 704, 705.

[23] "War, which in a commercial country, interrupts the commerce of States, frequently prevents the exportation of corn from countries where it can be produced with little cost, to others not so favorably situated. Under such circumstances an unusual quantity of capital is drawn to agriculture, and the country which before imported becomes independent of foreign aid. At the termination of the war, the obstacles to importation are removed, and a competition destructive to the home-grower commences, from which he is unable to withdraw, without the sacrifice of a great part of his capital." D. Ricardo, *Principles of Political Economy and Taxation,* pp. 251-2 (Gonner ed.).

[24] N. D. Kondratieff, "Die langen Wellen der Konjunktur," *Archiv für Sozialwissenschaft und Sozialpolitik,* Dec., 1926, and "The Long Waves in Economic Life," *Rev. of Econ. Stat.,* Nov., 1935; W. C. Mitchell, *Business Cycles, the Problem and Its Setting,* pp. 226-230; J. A. Schumpeter, *Business Cycles,* vol. i, pp. 164-5; S. S. Kuznets, *Secular Movements in Production and Prices,* pp. 259-266; E. Wagemann, *Economic Rhythm,* chap. v; A. H. Hansen, *Economic Stabilization in an Unbalanced World,* pp. 94-108.

[25] Although the existence of long waves in production is sometimes denied, the long-period movements in wholesale prices are almost universally recognized. Thus, Wagemann states that if more refined methods of measurement are used, "we shall find that, as far as German economic conditions are concerned, the phenomena of long waves is observable only for the money-volume series and not for the physical-volume series." Ernst Wagemann, *Konjunkturlehre,* p. 70 (*Economic Rhythm,* p. 78).

On the relation of long-period price movements to the duration and amplitude of de-

waves are caused by war, or their movements amplified by war, it could be said that the deep depressions during the downswing of the long wave are part of the post-war pattern of business cycles.

The suggested causes of the long wave are gold production, innovations and investment, and war. There is a tendency for the upswing of the long wave to be characterized by increased gold production, numerous innovations entailing much investment, and frequent war. The downswing of the long wave is characterized by decreased gold production, a curtailment of innovations and a decline in the growth of investment, and less frequent war. Gold production and innovations are consistent and mutually reinforcing causes of a long wave. Thus innovations in technique or in the development of new countries may facilitate increased gold production by providing superior methods of production or by opening new ore fields. Similarly, enlarged gold production, through rising prices and easier credit, makes investment more profitable and facilitates the undertaking of new enterprises. On the other hand, great wars are not favorable to enlarged production of gold or to new types of investment.[26] The conclusion must be that "it is not the war that causes the upswing. Rather it is the long wave upswing that produces favorable conditions for the waging of war."[27]

Although war cannot be regarded as the cause of the long wave, it may contribute to the termination of the upswing. This would be true if it became unprofitable to continue increasing the production of gold because of a war-time rise in prices and costs. Apart from any direct causal connection with the long wave, it cannot be denied that war intensifies the rise in prices and in interest rates during the upswing. To this extent, the monetary problems and readjustments in the downswing of the long wave are made more difficult. No doubt, even without war there would still be severe depressions in the downswing of the long wave; but it is reasonable to believe that the severity of these deep depressions is intensified by the difficult monetary problems growing out of war.

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pression, see W. C. Mitchell, *Business Cycles, the Problem and Its Setting,* pp. 410-12; Willard Thorp, *Business Annals,* pp. 65-67. On the intensity of depression in the downswing of the long waves, see J. A. Schumpeter, *Business Cycles,* vol. i, p. 173.

[26] The German literature on business cycles contains numerous references to war as a cause of the long wave. Consult Ernst Wagemann, *Konjunkturlehre,* pp. 74-75 (*Economic Rhythm,* pp. 82-84). S. von Ciriacy-Wantrup, *Agrarkrisen und Stockungsspannen, zur Frage der langen Welle in der wirtschaftlichen Entwicklung,* regards war and armament production as a major factor in the long wave, although he also recognizes the importance of gold production in these long-period movements.

[27] A. H. Hansen, *Economic Stabilization in an Unbalanced World,* p. 96. *Cf.* E. M. Bernstein, *Money and the Economic System,* pp. 174-77. It has been suggested that the upswing of the long wave induces war not by providing a favorable economic position for waging war, but by necessitating a more vigorous search for foreign markets, thus leading to political conflicts that terminate in war. Reasons for rejecting the latter explanation are given by J. A. Schumpeter, *Business Cycles,* vol. ii, p. 697, n.

A ZERO DEPOSIT RATE

A reduction of the rate paid on time and savings deposits to zero would increase substantially the profits of the banking system as a whole. It might, however, affect some institutions adversely. Such a reduction was impossible so long as banks acted competitively. Now, however, that they can act in concert, it would be profitable to reduce the rate.

Should the banks in any state reduce the rate to zero before similar action is taken by others, there would be a net gain in income to the community taking action first. Under monopolistic conditions the term interest applied to the deposit rate is really a misnomer. The function of this payment is to place a restraint upon competition for investment. Though the banks pay the entire cost of this restraint, all other investors receive the benefit in higher yields. In continuing to pay interest on deposits, the banks are, therefore, not acting to maximize profits. The deposit rate could also be used as an instrument of monetary policy to affect interest rates, investment, prices and output.

Why do banks pay interest on deposits?[1] What determines the rate; and what would happen if interest payments were reduced to zero? These three questions have both practical and theoretical significance. During the last few years the deposit rate has been continually revised downward, and it is now suggested that it can be reduced to zero. Administrative facilities now make possible such a reduction by concerted action on a national scale, or by state and county banking associations in different geographical areas.[2] What would happen to bank earnings and assets if a zero rate were put into effect? This is a problem in interest theory which, aside from a few remarks by Knut Wicksell, Ludwig Von Mises, and J. M. Keynes, has hardly been explored at all.

The following propositions will be advanced below:

I. The conventional competitive theory of the deposit rate is inadequate and inconclusive.

II. In a competitive banking system, interest must be paid by individual banks to attract reserves. The rate is a function of the loss-ratio and the loan rate of interest. The height of the deposit rate varies with the profitability of bank operations and an equilibrium rate of zero is theoretically possible.

III. In an oligopolistic situation such as the Big Five of England, the deposit rate would have a tendency in the short period to rise above the competitive

[1] Since the payment of interest on interbank deposits has been prohibited, this discussion is concerned solely with customers' deposits.

[2] Concerted and uniform action on the deposit rate was made possible in the United States by Sec. 11 (b) of the Banking act of 1933 amending Sec. 19 of the Federal Reserve act; Sec. 324 of the Banking act of 1935, and Sec. 101 amending Sec. 12B of the F.R. act. These confer powers upon the Federal Reserve and the F.D.I.C. to fix the deposit rate. Prior to 1933 this rate was determined primarily by competition and clearing house regulations. For these and a history of the deposit rate see Part II of *Commercial Banking Reform in the United States* by Leonard L. Watkins, University of Michigan, 1938. On recent legislation, see Watkins, chapter 6. State action is dependent upon statute. In Wisconsin, Section 220.04(6) of the statutes empowers the Banking Commission to issue orders with respect to the deposit rate. No law, however, is necessary to permit county associations to make voluntary agreements. These agreements have in fact been made in several counties fixing a deposit rate less than the maximum prescribed by either the state or federal authorities, and so far their legality has not been questioned. These agreements may not be enforceable at law as between the banks but such enforceability does not appear to be necessary.

rate, but in the long run it would still be determined by the same factors.

IV. The deposit rate could now be reduced to zero by concerted action without a significant loss of reserves to the banking system.

V. A zero rate would probably lead to slightly increased public investment and lower yields on existing securities.

VI. The function of the deposit rate is to restrict competition of depositors with the banks for loans. But the banks would gain on balance if they ceased to pay interest. The Big Five have not acted profitably in continuing to pay interest, and the American banks could now reduce the rate to zero to their advantage.

VII. Changes in the deposit rate could be used as an instrument of discount policy to influence output, prices and employment. A lower rate would be stimulating, a higher one depressing.

I

Let us review the conventional explanation of the deposit rate. It is said that depositors bring money to the bank which it in turn loans to borrowers. The gross earnings of the bank are determined by the volume and composition of loanable funds and the rates at which they are loaned. After losses and expenses of operation are deducted, the net earnings provide a margin out of which interest on deposits can be paid. Because of the competition for these funds among bankers who desire to loan them at a profit, a bank must pay interest or lose deposits to a competitor. The payment of interest on deposits is explained in this wise, like any other interest rate. The ability and willingness to pay arises from the earning power of loaned funds; the necessity of making payments arises from competition among bankers.

What determines the rate? The rate is a function of the interest received on loans and the expenses of doing business.[3] If the profits of the banking business rise, the bidding for deposits will drive the deposit rate up. If profits fall, so will the rate. In this way the rate should tend to oscillate around a level which permits a normal rate of profit in the banking business. Why is a different rate paid on demand and savings deposits? There is an incentive for the depositor to keep his funds subject to check for he needs them in this form in order to conduct his business. Demand deposits presumably remain in the individual bank only for a short period; a high reserve must be kept and the balance must be invested in liquid low-yield paper. Since the cost of conducting checking accounts is relatively great,

[3] This is perhaps a statement of the ideal. It has been observed that in practice, banks have had a tendency to fix the deposit rate first and then to see what could be done about earning it. This point as well as a discussion of the factors determining the deposit rate has been presented recently in an instructive address, entitled "The Cost of Money and the Bank Investment Problem," by Mr. Stephen M. Foster, economist, City Bank Farmers Trust Company, New York City, in *Proceeding of the Conferences on Bond Portfolios,* published by the New York State Bankers Association, and before the midwinter meeting of the Wisconsin Bankers Association, January, 1940.

little margin is left for interest payments. That is why interest on demand deposits until abolished by law, was usually less than on savings deposits. Savings deposits, on the other hand, require a smaller cash reserve, and can be invested in long-term, higher-yield securities. The expense of conducting savings accounts is also smaller and the net yield is higher.

This is a brief and admittedly inadequate statement of the theory of the deposit rate as found in most general works on the subject. The explanation runs in terms of buying and selling a physical commodity, called money. Particular writers, of course, elaborate and develop these ideas, but they do not develop a theory of the deposit rate intrinsically different from the theory of interest in general.[4] And for most ordinary purposes there is nothing substantially wrong with their views. They seem to me, however, to be incomplete and lacking utility for the purpose of explaining the effect of a zero deposit rate.

Their defect lies in their use of the physical analogy to describe bank operations. Money is conceived of as something which is brought into a bank and then loaned out. Instead of using the physical analogy let us discuss the banking process in terms of debits and credits, on the following assumptions: Deposits are liabilities and not assets. A bank loans not money, but its own credit. Deposits are a consequent, and not a source, of loaning power. Loaning power is not a direct function of deposits but of reserves.

Three different banking systems will be considered with reference to the premises. (A) A banking system composed of numerous competitors acting in the absence of rules or regulations limiting competition. This is the situation which predominated in the United States until recently. (B) A few units (oligopoly) not acting in concert with respect to the deposit rate. (C) Either many or few units acting in concert with respect to the deposit rate. It will be assumed that concerted action is made possible by agreement as in Great Britain or by both agreement and administrative regulation as in the United States.

II

In a system such as ours, with 15,000 units, each bank seeks to increase its reserves by increasing its deposits. It seeks both the new reserves which are added to the system by the deposit of hoarded cash, gold mining, gold imports, or central bank credit, and those existing reserves held by other banks. If banks are loaned to the limit of their reserves they cannot make new loans without new reserves. On the other hand, if they already have excess reserves, they will make loans only if there is a demand by borrowers

[4] For an exposition of these views see Professor R. G. Rodkey's article on "Bank Deposits" in the *Encyclopedia of the Social Sciences,* and Ludwig Von Mises'. *The Theory of Money and Credit,* p. 270.

with riskless collateral, or if the rate compensates for the risk and marginal expense. If there were no risk element, the loan rate would fall close to zero so long as excess reserves existed. Whenever risk exists, the loan rate cannot fall below the estimated risk. It is because there is insufficient demand for riskless loans and because the rate of interest offered on risky loans is too small, that we have excess reserves. The contention of Professor Knut Wicksell,[5] that banks can expand indefinitely if they keep the bank rate below the market rate, is qualified by the phrase "so long as the security of the borrower is adequate." But this is the essence of the case. Those who wish to borrow do not always have adequate security. Moreover, on the assumption that "security is adequate," it is impossible to explain the existence of a continual large quantity of excess reserves and rates of interest exceeding the cost of administration. That is why it is necessary to use the loss-ratio[6] explanation of excess reserves.

Since practically all loans involve some risk, banks compute what they term the loss ratio. The loss ratio is the percentage of losses to total loans.[7] This can be computed from past experience but it is effective for action only in so far as it is expected to continue. There is no precise rule for judging risk. If bankers are optimistic, lending policies are liberal; if fearful, they become conservative. Whenever the expected loss ratio plus the marginal administrative cost exceeds the loan rate of interest, banks should not be desirous of increasing their deposits and reserves. On the contrary, they should be glad to see their deposits shrink and go to a competitor. Indeed, the indifference to the volume of deposits at this particular time has been noted, and the bankers are relatively indifferent to new deposits. They seek them only in so far as they act from habit or are thinking of the future. On the other hand, if the loss ratio is below the loan rate, it will be profitable for banks to lend, and they will seek to attract deposits and reserves by providing checking service without cost, or even by paying interest on time and savings deposits.[8] Banks having the greatest net returns (gross income minus expenses after losses) can afford to pay higher rates of interest and thereby attract deposits.[9] A bank refusing to pay interest or paying interest at a rate less than other banks would lose deposits.

[5] *Interest and Prices*, pp. 110-111. See also Ludwig Von Mises, *op. cit.*, pp. 311 and 345.

[6] I shall use the terms risk, loss ratio, and expected rate of loss interchangeably always bearing in mind that it is the expectation which is significant.

[7] Computed as a percentage of deposits, the loss ratio of total insured commercial banks for year ending December 31, 1938, was 1 per cent of deposits. This was made up as follows: .30 on loans .45 on securities; .25 all other. From Table 27, Bull. 78, Aug., 1939, *Earnings and Expenses of All Insured Commercial Banks, 1938*, published by the Research Council, American Bankers Association.

[8] I am deferring until Part VI a consideration of the effect of competition of other lenders on the interest rate. At this point we are treating the deposit rate as a result of profitable loan operations and not as a cause.

[9] The actual rate of profit on capital and surplus would depend upon the ratio of these items to total assets. A bank which had a large ratio of capital to total liabilities would

To summarize: In a competitive system, banks pay interest on deposits to attract reserves. They wish reserves to make loans. They will make loans if the rate of interest is higher than the loss ratio and refuse loans if the loan rate is lower than the loss ratio. When a bank wishes to make additional loans, it must pay the competitive rate on deposits—otherwise it will lose reserves. If it has adequate reserves, it need not attract deposits and may therefore lower the deposit rate. The equilibrium deposit rate for the individual bank is one which induces neither an excess nor a deficiency of reserves. The equilibrium rate for the banking system is one which does not induce shifts of deposits from one bank to another. Competition determines the height of the deposit rate, and it will operate to raise or lower this rate as the loan rate rises and falls. Moreover, even under perfect competition the deposit rate could fall to zero.

III

Under both oligopoly and competition the deposit rate will be determined by the same basic factors: the volume of loans and the loan rate, minus losses, operating costs and competitive profits. If both banking systems were always operating at optimum, and if all costs varied directly with output, the method of explaining the height of the deposit rate would be the same for both systems. The chief difference in the result would be that created by differential costs. We do not know which system actually has lower unit costs, but if we assume that the branch system would have lower unit costs, then either the deposit rate or profits would be higher, or the loan rate would be lower. The last alternative is less probable than the former two because the loan rate would be determined in the entire investment market. So long, however, as neither system is operating at the long-run optimum there probably would be a short-run tendency, in the absence of anticipation of consequences, overt or tacit combination, for the branch banking system to compete more vigorously for deposits. This because a branch banking system differs from a multiple system in two essential respects: (1) the expansion ratio is greater, and (2) fixed costs are a relatively larger part of total costs. These two facts might, but need not necessarily, raise the deposit rate to what would be in the long run an unprofitable level. This fact, among others, has induced the Big Five of England to fix the deposit rate by mutual agreement. In Part VI, I shall show why these banks could to their own advantage have reduced the rate to zero.

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be safer than one with a small ratio, but its earnings would be proportionately less. Both safety and rate of return would enter into the judgment of the depositor in choosing his bank.. In actual practice, of course, the depositor is not able to make an intelligent choice. But he does make some sort of judgment, at least, by preferring a high deposit rate to a low one, and that is all that is relevant for our analysis.

Let us now see how the larger expansion ratio and greater overhead costs lead to more vigorous competition for deposits under oligopoly. The expansion ratio determines the amount of new loans which a bank can make with a given increment of reserves, due to a primary deposit. A large expansion ratio consequently increases the size of the marginal increment of income due to accretion of a given amount of reserves. On the cost side, the fact that fixed costs are a large part of total costs means that the primary incremental cost of handling a new loan is relatively smaller than under a multiple system. The marginal increment of revenue being greater and of costs being smaller, either profits or the deposit rate would be higher.

(1) Studies of the expansion power of the English and American banking systems show that an English bank can probably count on a greater ability to loan on the basis of a given addition to reserves than an American bank; but it will also lose loaning power proportionately with the loss of reserves.[10] The coefficient of expansion of an individual American bank is from .9 to 1. Professor Watkins estimates the immediate expansion power of the large English banks as from 1.4 to 2.2 times a given increment of reserve. The smaller English institutions conform more closely to the American standard. This difference is due primarily to the fact that a large branch bank is more likely to retain derivative deposits than a small one, since the checks drawn by the borrower have a greater probability of being redeposited in the same institution. If a bank could find a ready demand for loans at 5 per cent and could loan two dollars for each addition to reserves of one dollar, its marginal gross revenue would be at the rate of 10 per cent per annum of the addition to reserves. Considering gross revenue alone, we might conclude that a bank could afford to pay a much higher deposit rate in the short period if its loan expansion ratio were high than if it were low. We must, however, deduct from gross revenues the interest paid on the derivative deposits and the cost of making the new loans. After this is done, the remaining net revenue is greatly reduced, but it would still be higher under oligopoly than under competition.[11]

[10] See "The Expansion Power of the English Banking System," Leonard L. Watkins, *Quart. Jour. of Econ.*, Nov. 1938. On the American, see footnote 2, p. 10 and reference; on the British, p. 12.

[11] Since the deposit rate is not discriminatory, interest would have to be paid on the derivative time deposits as well as on the primary deposit which brought in the additional reserve. Profits from the transaction would then depend upon the relative proportions of the derivative deposits which would be redeposited as time and demand deposits. The larger the proportion consisted of demand deposits, the larger would be the probable profit from an accretion of a given unit of primary deposits and the higher the possible deposit rate. On the other hand, as the proportion of derivative savings deposits increased, the corresponding increment of costs paid as interest on deposits would be increased, and the lower the rate which could be paid. To illustrate: If a bank loaned 2 dollars for a year and the resulting deposits were retained as derivative demand deposits, its marginal revenue before operating costs and losses would be 10 per cent of the loan. If the 2 dollars were retained as savings deposits, paying a rate say of 2½ per cent, the bank's marginal

(2) This brings us to a consideration of marginal costs. Since fixed costs are a large part of total costs, the marginal increment of new loans could be made at a small additional handling cost. This might actually be negligible, but if we add to it the probable loss it would be a significant positive quantity. In 1938, the average loss computed retrospectively was 1 per cent of deposits, differing, of course, on different types of loans.[12] Where no loss appears probable, such as in short-term government loans, the existence of excess reserves leads to well nigh infinitesimal yields, which indicate the marginal cost of such new loans. We may conclude then that the fact of slight marginal unit costs and increasing marginal revenue would lead to severe competition for deposits among branch banking institutions, unless there were anticipation of the ultimate consequences of this competition or agreement to the contrary. In England the deposit rate has been fixed by agreement.[13]

There are two ways for a few competitors to avoid the effects of short-term cut-throat competition: by anticipating the consequences to themselves and exercising self-restraint; or by entering into tacit or overt combination. If there were no agreement, no definite conclusions could be drawn about the effects of retaliation and follow-the-leader policy. The rate might be equal to, higher or lower than the competitive rate.[14]

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revenue on the transaction would be only 5 per cent before operating expenses and losses. But in either case, the total revenue before losses and operating expenses would be greater in the oligopolistic than in the competitive system because total loans would be greater.

[12] See footnote no. 7.

[13] The London deposit rate is fixed by agreement among London clearing banks at $1\frac{1}{2}$ per cent to 2 per cent below the bank rate. The country deposit rates and the savings account rates are also fixed. Thus, in fact, the English banking system, so far as the depositor is concerned, is not oligopolistic, but monopolistic. There is practically no competition for deposits based upon price.

[14] If the Midland Bank, for example, should contemplate raising the rate above the other four British banks to attract additional reserves away from them, it would hesitate to do so because it would anticipate that the other four would do likewise and thereby nullify the supposed differential advantage. Such an attempt to gain additional reserves by one bank would thus end merely in raising the deposit rate of all, thereby benefiting depositors and lowering profits. But we cannot say that for that reason it might not happen. If, on the other hand, Midland contemplated lowering the rate in order to increase its profits, it might also anticipate that the rest would fall in line. The rest might reason that unless they also did lower their rates, Midland would again raise its own and they would have no differential advantage. If, however, they followed the leader, they, like Midland, would also increase their net profits. The lower rate would thus not bring about differential advantage but merely increased profits. A differential rate might, however, tend to persist for a time if one of the banks actually had lower costs or better loan opportunities than the others. From this we may conclude that no positive conclusions can be inferred if we assume that rivals are conscious of one another's reactions. The actual position of the rate is indeterminate, for it depends upon what bankers think their competitors will do. Judgment of probable action depends upon a knowledge of the habits of mind of the individual bankers and the customs and institutions under which they operate. We can, of course, indulge in a great many deductions from a multitude of different premises about the probable anticipations and reactions of a few competitors conscious of one another's reactions. But this appears to be futile. There is, however, one

Our chief problem, however, is not the effect of oligopoly but of monopoly upon the deposit rate. We desire to know what banks can do about this rate if they act in concert. Concerted action is generally believed to be more easily achieved among the few than the many. But the possibility of combination is not a mere matter of the number of competitors. Given proper laws and banking associations as in the United States today, price fixing can be carried out just as effectively among the many as among the few. The Big Five in England can agree, but so can the groups of banks in counties, states and the nation, regarding the level of the deposit rate. The question is therefore pertinent: how far can a group of bankers acting in concert go toward reducing the deposit rate profitably below the competitive equilibrium rate? We have seen that under competition they can reduce the rate to the competitive level, even though it may reach zero, and under oligopoly, the short-term rate may be equal to, higher or lower than the competitive rate. But can banks reduce by agreement and administrative order this rate to zero without any consequences detrimental to themselves?

IV

Qualitatively, the effects which follow from the reduction of a rate are the same whether the reduction be great or small, to 2 per cent, 1 per cent or zero. Quantitatively, the effects would be of greater or smaller magnitude. In order to simplify discussion and to bring out in strong relief the consequences of a reduction, let us now consider what will happen to reserves and loaning power if interest on all deposits were reduced to zero. We can then modify our conclusions for different quantitative changes.

It is a common error in looking at the banking system as a whole to carry over the habits of thought used in connection with the individual bank. One of these is the assumption that if deposits are "spent" or "withdrawn" they somehow diminish the power of the banking system to loan. This is true of the individual bank but not of the system. So long as checks

fact which we may consistently bear in mind. Business-men and bankers in an oligopolistic situation realize that they are hardly ever operating at optimum for any period of time because of fluctuations in investment and other business conditions. To base policy upon short period considerations is to base it upon short-sighted considerations. And there is no internal compulsion in the price system to compel business-men to be myopic. In so far as they can do so, they therefore try not to do in the short run what they know they cannot do in the long run. The dichotomy between short and long-run policy is in this respect of doubtful significance for the explanation of banking policy, though as a conceptual scheme it may show the factors and conditions governing price behavior. A bank must have a continuous and non-discriminating policy toward depositors. It cannot pay a higher than average rate to some individual depositor to get him to transfer his account from another bank, because it can make, as we have seen, a large profit on this marginal amount. For it must at the same time raise the rate on all other time deposits. And if it does this, it will probably lose more than it will gain. The high expansion ratio, despite its obvious profitability from the marginal view, should not therefore be expected to make any permanent continuous substantial difference in banking practice regarding the deposit rate.

are redeposited, the withdrawal of deposits by individuals has no effect on total deposits, reserves or reserve ratios and consequently none on loaning power.

If it were not for a technical legal peculiarity of American banking, about to be mentioned, excess reserves and hence the ability of the banking system to extend its loans would be limited by one factor and one only: the loss of reserves by withdrawal of deposits in the form of notes (or other cash where permissible) for circulation or for hoarding.[15] In the British banking system, this is the only factor which would limit loan expansion. In the American system there is the additional effect upon excess reserves created by the fact that a lower legal reserve is required for savings and time deposits than for demand deposits. A shift of savings into demand deposits consequently lowers the excess reserves and hence potential loaning power of the banking system. Both the withdrawal of notes and shifting need therefore to be considered as factors limiting loaning power.

Let us consider first the possibility of the withdrawal of notes for circulation. A zero rate might lead to increased consumption, which would bring about the use of additional notes and demand deposits in the retail trade. If this happened, the withdrawal of cash would directly reduce total reserves; the shift from savings to demand deposits would reduce reserve ratios and hence excess reserves. But rather than consume their savings because the deposit rates were cut, it seems more likely that depositors would invest in existing securities which would be paid for by check or draft. This would cause no loss in circulation. If the funds were used, however, to buy new securities, and total investment, incomes, employment and retail trade were increased, there would be a corresponding effect on circulation and reserves would be diminished. In general, it may be concluded that only in so far as the zero rate of interest stimulated business, especially retail sales and payrolls, would it cause a diminution of reserves by increasing note circulation.[16]

Would the zero rate cause a withdrawal of notes for hoarding? The chief factors determining the form in which people hold their cash for the precautionary motive are safety, cost and convenience. Since there are no service charges on savings accounts, the main consideration leading to the hoarding of notes would be safety. Small depositors are now protected by the FDIC and would prefer a bank account with a zero rate to hoarding bank notes. FDIC insurance covers about 84 per cent of the total savings and time deposits amounting to $13,612 millions.[17] Large depositors, corporations and individuals are not fully protected by insurance, generally

[15] In this discussion, a closed national system is assumed. All conclusions must be modified, in so far as the system is affected by external drains due to gold movements. This, however, we may regard immediately as a central bank problem.

[16] For a discussion of new investment, see Part VII, below.

[17] *Fed. Res. Bull.*, Feb., 1939, p. 101 and 102.

receive no interest on balances, and are not now hoarding bank notes. It is quite unlikely therefore that either large or small depositors would suddenly begin to hoard notes if the deposit rate were reduced to zero.

The shift from savings to demand deposits in the event of a zero deposit rate would require larger legal reserves and thus reduce excess reserves. How much of this shifting would go on? Since banks generally make small service charges against demand deposits and none against savings deposits, individuals would not switch directly to demand deposits without some substantial reason. The shift would come about as savers bought securities and transferred their inactive funds into active hands.[18] The new holders would probably hold them in the form of demand deposits. If the deposits coming into new hands were, in fact, active deposits, they would favorably affect business activity. But if the new deposits were in fact idle, even though nominally demand deposits, then a small inducement in the form of a deposit rate might induce depositors to classify these deposits formally as time deposits. The purpose of such compensation is not to prevent competition,[19] but only to induce the depositor to classify his deposit in such a way as would be convenient for the bank. Proper salesmanship together with service charges on demand deposits might accomplish this purpose even with a zero deposit rate.

We may conclude that the zero deposit rate could cause excess reserves to be diminished somewhat because of increased circulation, hoarding, and the higher reserve requirements for demand deposits, but the magnitude of the change would probably be small. Moreover, since reserves are a conventional element, subject to alteration by the board of governors, it is not so much the effect on reserves which is important as the effect of competition by depositors upon the rate of interest and the willingness of the banks to hold old and make new investments at the new rates of interest.

V

Let us now examine the effect of a zero deposit rate upon (1) the investment activity of savings depositors who now hold deposits for investment purposes; (2) the loan rate of interest; and (3) the volume, composition and quality of bank assets.

(1) Those savers who hold savings deposits for safety alone would be unaffected. But those who hold them as investments for income would seek to invest their funds elsewhere. This might cause an increased bid for existing securities or investment in new assets. The consequences would be different if investors bought from other individuals or from banks. With a

[18] This might even be carried so far as to be inflationary. But this is a problem in monetary policy and the effect of MV on prices and output. See Parts VI and VII. Also Keynes, *Treatise*, vol. i, pages 11 and 12, describing the so-called inflationary effects of this move in England in 1915-1916.

[19] As discussed in Part VI.

zero deposit rate, safety and liquidity would remain the sole incentives for holding bank deposits. Depositors who desired income would have several alternatives: purchase of stock in savings and loan associations; transfer of funds to the postal savings system; the purchase of baby bonds, open-market government bonds, or other securities.

If they invested in insured savings and loan companies, they would make some sacrifice of liquidity and probably some of safety.[20] The higher yield on savings and loan stock would probably be deemed sufficient to warrant the partial sacrifice of safety and liquidity. This would increase the cash of savings and loan companies and (assuming no increase in new investment) would lead them to bid mortgages away from existing holders. This would, in effect, be an increase in the supply of mortgage funds and would drive down the rate of interest. Since these organizations keep deposits in the banking system, this transfer would increase the velocity, but would have no effect on the quantity of deposits. The banks would have the same reserves and deposits as before these transactions. The main influence would be to lower the rate of interest on the same quality of loans or to encourage more risky loans at the same rates of interest.

Other investors might deposit with the postal savings system, purchase government bonds or savings certificates. If the sellers of bonds were other individuals, they would in turn be potential investors. Competition would force up the price of bonds and drive down the yield, without increasing the total par value of investment. The same effects would follow, no matter what type of investments were made. Open-market transactions between individuals would have no effect on the reserve ratio of the banks. They would merely cause bond prices to rise. And, after a period of time, as bonds matured, or were refunded, they would be exchanged at the lower rates of interest. This would decrease bank gross earnings.

The purchase of securities from banks causes bank assets and deposits to decrease. Reserves would be unchanged, but reserve ratios would rise. The banks could then make investments until their reserve ratios again fell. If there were no new securities (as posited) this would drive down the rate of interest. In any case the power to loan is unaffected. It is the interest rate which falls because of the competition of private lenders.

(2) We may summarize the effects of a zero deposit rate upon the risks taken and the loan rate of interest:

[20] Building and loan associations insured by the Federal Savings and Loan Insurance Corporation appear to afford protection not quite equal in safety or in liquidity to the FDIC. The Federal Savings and Loan Corporation promises the investor, in case of default of an insured institution, (1) a new account in an open insured association, or (2) 10 per cent cash, 45 per cent one-year debentures and 45 per cent three-year debentures. For a brief discussion of the manner in which the FS&LIC protects the investor, see pp. 11-13 of *Insurance of Accounts to Build Larger, Stronger Associations* by Oscar R. Kreutz, Deputy General Manager, FS&LIC, Washington, D.C.

1. Risk remaining the same, the yield falls.
2. Risk increasing, the yield does not rise commensurably.
3. Risk may increase somewhat and yield fall somewhat.

(3) What would be the effect of a zero rate on the volume, composition, and quality of bank assets? Since individual savings have no effect on the loaning power of banks, there need be no effect on the total volume of bank loans. The composition of earning assets would probably remain unchanged at first as banks simply made new loans and held the same securities. But after a time there might be some effect both on composition and quality of assets. There are two possibilities: the fall in yields on high-grade securities might induce the banks to buy securities having greater risks. Or, since the zero rate enabled them to cut expenses, they might actually buy higher grade, lower yield securities. The result would depend upon their comparative preference for income or for safety.[21]

The main fear of a reduction of the deposit rate on the part of state banking officials who are responsible for examination of both savings and loan institutions and banks is that both types of institutions will begin to make more poor loans. This view is re-inforced by the fact that it is not the lack of existence of potential borrowers who have adequate collateral which causes the present small amount of investment, but the unwillingness of these borrowers to venture. They will not risk their own funds, even at low rates of interest, with the present economic outlook. An expansion of loans would probably come from those with little equity of their own who, in fact, were risking the funds of banks and other institutions. Whether it is desirable at the present time that banks and other financial institutions should take inferior assets in order to encourage economic expansion is a question of such large import that it is beyond our present scope. Two views can be indicated: If one believes that greater risks and lower interest rates are desirable for business expansion, he may look with favor upon increased risk-taking by banks. If, on the other hand, one looks primarily at the quality of bank assets and the demand side of the equation, he may conclude that it is more desirable to improve the prospects for profit by various cost-price adjustments, changes in tax policy, and other measures which will restore the confidence of private individuals who have adequate assets to pledge for loans and are willing to take business risks.

VI

What is the function of the deposit rate? In a competitive banking system it has two functions: to prevent competition in the investment markets; and to induce the individual depositor to keep his deposit in a specific bank and

[21] Stephen Foster, *supra,* argues that banks should first select sound bonds and then adjust the deposit rate to the yield of bonds. If they did this, a zero rate might bring about better security holdings.

thus to provide that bank with reserves. An individual bank pays interest on deposits primarily for the second reason. But if the banks are able to act in concert, the first reason becomes the only one. From the viewpoint of the banking system as a whole, the deposit rate is an inducement to the depositor not to compete with the banks (and with all other investors) but to keep his funds idle. The purpose of the deposit rate is to place a restraint upon competition for investment.[22] The depositor gives up a potential investment, the bank gives him liquidity and interest.[23]

The word interest appears to be a misnomer when applied to this payment. For interest is defined as a payment made for the use of money or of physical goods. From the viewpoint of the banking system, the payment of interest to depositors is not pay for the use of their money. The banks do not use the deposits of customers. If the customers do not use their own deposits, no one else does. They are idle. And interest is paid to keep them idle. The deposit rate is the price paid to keep a potential competitor out of the investment market. Although the banks alone pay the cost of maintaining idle money, all investors reap the harvest in higher rates. If they must compete, there is nothing else that the banks can do. It is otherwise, however, when the banks are able to act in concert. If they were to cease this competition, they would not need to pay interest on deposits at all. Loan rates and bond yields would fall when the depositors began to invest. But they would fall for all investors alike and not for the banks alone. And since the banks hold only a small portion of the total interest-bearing debt in the United States, they would probably gain much more by reducing the cost of interest payments than they would lose by a fall in the yield of their investments.

Quantitatively this is difficult to prove, since it would involve a computation of the percentage fall in interest rates caused by a zero deposit rate. This multiplied by the total volume of earning assets would give the net loss to the banks due to this one cause. If this amount were less than the amount saved by omitting payments to depositors the result would be a net saving to the banks.[24] While admittedly the judgment here made may

[22] Wicksell is the only writer, so far as I know, who clearly recognized this. ". . . the banks have to accept these sums on deposit and pay interest on them even though they do not really want to; and they have to pay a rate which falls only a little short of their own discount rate, for otherwise they would suffer from competition with private lenders." P. 116, *Interest and Prices*. Wicksell, however, did not distinguish between a competitive and a monopolistic situation and he did not show that in the latter case the banks, alone considered, gain in the aggregate more than they lose by thus preventing competition in the investment market.

[23] *Cf.* Keynes, *Treatise*, vol. i, p. 36.

[24] Total insured commercial banks in the United States for year ending December 31, 1938, paid out on the average \$0.46 for each \$100 of deposits. Net earnings from operations before losses but after payments to depositors were \$0.94 per \$100 of deposits. It follows that if all other items had remained constant, and no interest had been paid on deposits, the rate of earnings would have been increased almost 50 per cent. See Table 27,

be wrong, it is also true that the present policy of paying interest on deposits is not the result of a conscious decision on the part of the banking system as a whole, or a consequent of a calculation of possible losses and gains to the system. It is a result of the competitive attitude which, *ex hypothesi,* we are now eliminating. But the conclusion here is in line with the general theory that it is not profitable for one of numerous competitors to restrict output or to purchase and dismantle and thus put out of competition some one or a group of these competitors.

Banks, insurance companies, savings and loan companies, and all other institutional and private investors would feel the increased competition of time and savings depositors. Markets, however, are imperfect, and those in strategic loan positions might be able to loan profitably while others still had idle funds. This is especially true of the commercial banking system. The banks, in so far as they cater to commercial and personal short-term demand, are in a quasi-monopolistic position which gives them preferred loan opportunities and also makes it unnecessary to reduce customers' rates strictly in line with open-market rates. Assuming they have an alternative, as I think they now have, it seems clear that it is not to the interest of the banks to pay the whole cost of placing a restraint on competition for investment so long as all other investors are sharing the benefit. If they can do so, it will therefore be profitable for the banks to come to an agreement by which they eliminate interest on deposits.

In view of the fact that British banks have acted in concert in the past, it is surprising that they have not already done this. Though they have set the interest rate by agreement, they apparently have not known where their own interest lay, or if they did know, they had not been willing or able to pursue it to the utmost for reasons of state, public opinion or treasury policy. There is no other reason why they should not have reduced the rate to zero.

In showing that the banking system as a whole would not lose reserves and loaning power by a reduction in the deposit rate, we do not prove that all individual banks would survive such a policy. While the banks in the aggregate would gain, purely savings banks and those institutions having a high percentage of savings deposits might find their reserves depleted as their depositors purchased bonds in the New York market. A uniform zero deposit rate would therefore probably cause a shift in the location of reserves and deposits. Under a branch banking system this would be of little significance. Loans could still be made where needed and banking services furnished. But under a unit banking system, savings banks and some commercial banks in small towns, having a large percentage of savings deposits, might not be able to survive. Banks doing a predominantly demand

Bull. 78, August, 1939, *Earnings and Expenses of All Insured Commercial Banks, 1938,* published by the Research Council, American Bankers Association.

deposit business would have the advantage. To the extent that different banking areas constituted non-competing groups, it might be possible to have a zero rate in some areas and a positive rate in others, thus enabling those banks to survive which must pay interest on deposits in order to hold their reserves. If, therefore, the banks of some single state by the order of the authorities should abolish the deposit rate, it might cause some shifting of reserves within the state and from the state system to the national system. Just how much of a drain would be set up would depend upon the action of depositors and the amount of redeposits within the area. Under present conditions, many banks have such large excess reserves that they could afford to lose some of them to other centers without seriously impairing their loan position. But these are questions of magnitude subject to answer only by quantitative data and not by theory.

If, at such a time as the present when practically all banks have excess reserves, the banks in a single state, like Wisconsin, ceased to pay interest on deposits, the banks of that state would increase their profits by a commensurate amount. The depositors could purchase United States securities in the New York market or baby bonds. The state system would simply lose non-interest bearing idle reserves and the residents of the state as a whole would gain income equal to the interest on the new investment. The effect of new investment by one state's depositors on the interest rate would be negligible. It is, therefore, to the interest of a given community to reduce interest rates on deposits before that is done by other communities. When all communities fall in line, assuming no new investment, the differential advantage would disappear.

It seems reasonable to conclude that the banks as a system would increase their earnings, even if investment was not increased, if the deposit rate were reduced to zero throughout the nation.[25] Banks would also become more solvent as bond prices rose. The fall in yields would increase the capitalized value of bank assets but would have no immediate effect on earnings. Banks would have the same bonds as they had before and the same earnings from them. All that would be changed would be their market value. After a time, as bonds were refunded at lower rates, bank earnings would decline. But how far would yields fall? That is unpredictable. The quantity of deposits would remain the same, but present holders would seek to exchange their deposits with present holders of securities. Since markets are created by differences of opinion, it is not possible to predict at what prices the change of securities for cash would take place. The lower limit of the yield would be where the loss ratio was equal to the rate of

[25] Profits would probably rise above the present level but not so much as the 50 per cent increase which would eventuate if loan rates and bond yields remained constant—which they probably would not do.

interest.[26] Assuming competition and some constancy in opinion, the price of securities and the loan rate of interest would come to rest at points where the existing holders of bank deposits preferred to hold non-interest bearing bank deposits to loans or securities; or more precisely, where exchanges of cash for securities were made over a period of time only at unchanging prices. Since the loss ratio is not a hard fact but an expectation, it is subject to change. Even so, composite opinion does and will arrive at some rate at which people generally will not venture further. When this point is reached, security prices would come to rest and there would be no change unless there were a general change in the marginal efficiency of capital.[27] The latter would have to be the consequence of new invention, increased demand, or some cost-price adjustments which would make new investment profitable. So long as the choice was simply between holding cash and existing securities, there would be no effect on new investment. Should yields fall, however, it is likely that it would become profitable to produce new capital assets at the preëxisting costs. This brings us to the consideration of the effect of the deposit rate on new investment.

VII

A reduction in the deposit rate should stimulate new investment in physical goods. Since bank profits would rise, and/or deposit rates would fall, competition would force the banks to reduce the lending rate to an amount somewhat above operating costs plus the loss ratio but not including the deposit rate which previously had to be included. Banks could choose between increased risks or lower rates of interest. A country bank, for example, which formerly paid 2 per cent on 50 per cent of its deposits would find that with a zero deposit rate it could cut its loan rate by 1 per cent and still have the same net profit, or it could loan a greater percentage on farms and homes at the old rate and keep a larger depreciation reserve.

Under conditions of partial employment, with a marginal elasticity of output[28] close to 1, new investment would probably bring about increased

[26] If the loss ratio were equal to the rate of interest there would be no pure interest but only an amount sufficient to cover losses and risks. If, however, pure interest exists, then the loss ratio plus pure interest (or the amount to induce people to part with cash) would be equal to the loan rate of interest. Since all factors of uncertainty are included in the loss ratio, I do not see how there can be pure interest under competition so long as there are uninvested funds. But this is a problem beyond the scope of the present discussion.

[27] It may be that at this level there would be no pure interest but simply an amount sufficient to cover estimated risk and the cost of making the loan. See Keynes, *General Theory*, pp. 375-376.

[28] By the elasticity of output I mean simply the percentage change in output divided by the percentage change in expenditure with which it is associated. This would be the reciprocal of the elasticity of price. If the elasticity of output was 1, there would be no increase in price with increased expenditure, but a commensurate increase in output.

output and employment. As the coefficient decreased, output would increase at a lower rate and prices at a faster rate. These would be followed by secondary effects.

A word about the effect of these dynamic changes on the long-run rate of interest. Increased output and employment would increase total monetary incomes and consumption. These might in turn lead to increased capital expenditures and new long-term investment. With the general rise in expenditure, the marginal efficiency of capital would rise. In view of excess reserves, the market rate of interest might or might not rise. Additional loans would probably be made at existing or slightly higher rates of interest. A rise in the market rate of interest which is due to an increase in the marginal efficiency of capital is not depressing, while a rise due to an increase in liquidity preference is. Larger profits and an increased demand for capital might then raise the rate of interest to a new level which would be more profitable to the banks than that which existed previously. In view of these cumulative factors, we cannot say that the long-term consequence of lowering the deposit rate would be to lower the rate of interest; it might, in fact, be to raise it. The consequences depend upon many circumstances and the magnitude of the quantities involved. My own judgment is that the magnitudes are so small that the total effect would be slight.

Within these limits, the deposit rate can be used as an instrument of monetary policy. Independent of changes in a liquidity preference, a high deposit rate tends to lower the velocity of money and raise interest rates; a low rate to raise the velocity of money and lower interest rates. A high rate is depressing, a low rate inflationary. It is possible for the deposit rate to be made so high as to cause depression by raising lending interest rates unless the quantity of money is adjusted to the demand for it by the creation of additional deposits. During the years 1925-1929 the growth of idle savings and time deposits was encouraged by the banks in the United States, but it was offset by an expansion of loans and consequently of demand deposits. If we should meet with the opposite situation, the inflationary effects could be controlled in two ways: by central bank restrictive discount policy or by raising the deposit rate.[29] The deposit rate can therefore be used jointly with discount policy to influence interest rates and the quantity and velocity of money.

It should not, however, be imagined that it is possible to overcome the divergence between the rate of interest and the marginal efficiency of capital by purely monetary policy. If the expectations of profit are small, and the prospects of loss are great, investors will prefer to remain in a cash position; and no monetary policy, other than forced spending, can bring about new investment. The banking system would cease to lend as the loss ratio became higher than the rate of interest. Private lenders would

[29] See Keynes, *Treatise,* vol. i, pp. 11 and 12.

follow suit. The bidding up of existing securities and the reduction of yield, if carried on for any length of time, would bring the rate of interest down to the loss ratio and there it would rest. Unless this ratio were decreased, no expansion of new investment would take place.

When we reach this point, purely monetary analysis must give way to a consideration of factors governing new investment: population, invention, savings, consumption, and their historical trend and outlook.[30] Only if we knew what the trend of events will be could we say what will happen to the prospect for profit. Short of this knowledge, we may make a present adjustment to under-employment by governmental deficits for consumption, armament, housing, or public works; or on the private front by cost-price adjustments in particular areas and industries in order to stimulate private investment. These are problems in economic, monetary and fiscal policy. Changes in the deposit rate can be considered in a narrower setting. The banks as an industry must adjust costs to income. Reduction of the deposit rate is simply one of the necessary cost-price adjustments.

It now appears that the federal government will incur extensive deficits during the next few years for armament. If it is desired to finance this program without increasing the quantity of bank deposits, it might be desirable to reduce the deposit rate sufficiently to induce present holders of savings deposits to purchase government securities. This would also tend to keep down interest rates. It is probably desirable also that an increasing portion of the government debt should be held by private individuals, rather than by the commercial banking system.

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[30] See Alvin Hansen, *Am. Econ. Rev.*, March, 1939, pp. 1-15.

ITALIAN MONETARY AND EXCHANGE POLICIES UNDER FASCISM[1]

Italy has developed a policy of self-sufficiency and exchange control in the last few years due to international pressure and sanctions. The exchange rates cease to be free; there is no arbitrage; and governmental agencies control the supply and demand for foreign exchange. Bilateral foreign-trade agreements are encouraged, and clearing agreements are concluded to pay for goods from abroad. Exporters are aided by special price dispensations. The internal price structure gets out of harmony with the international price equilibrium, such as it is.

Banking, moreover, has become a virtual monopoly of the government. The I. R. I. made heavy loans both to industry and private banks, which soon became public banks. The *Banca d'Italia* ceased to be owned by private stockholders in 1936. The entire credit system gradually passed over to the control of the powerful committees of the government which rule through the central bank.

I

What interests economists and students in the mechanics of totalitarian states is just how they do it. It is too simple to say that "everything is controlled" and let it go at that. It is also erroneous to assume that all controlled economies operate much the same way. The more curious will want to know the details of economic control. The development of Italy under fascism has been directed toward the ends of autarchy and armaments in the last few years. The purpose of this article is to trace the development of the government programs through the growing control of monetary and exchange policies.

A policy of balanced foreign trade necessitates control of the exchanges. In Italy the control of the imports and exports started in 1934; but it was not until May, 1935, that Guarneri, a capable economist, was appointed Superintendent (later Undersecretary) of Foreign Trade and Exchange. In November, 1937, the position was further dignified by making him a member of the Cabinet. He held this post until the Cabinet shakeup at the end of October, 1939, when Riccardi succeeded him.

Under the rigid controls imposed, exchange rates ceased to be free market rates. The entire internal and external monetary structure is managed. Italian exporters must deliver claims on foreign buyers to the central exchange authorities. There is only one buyer for such bills—an agency of the state. In order to send money abroad, importers must get approval from the office of the Secretary of Foreign Trade and Exchange. Thus, there is only one seller of foreign funds. Consequently, the Institute of Foreign Ex-

[1] While this article represents my own thinking and point of view, the inspiration for it came from Louis Rosenstock-Franck's excellent new book, *Les Etapes de l'Economie Fasciste Italienne,* Paris, 1939. Much of the illustrative material is Rosenstock-Franck's, although I have brought everything up to date and used other data acquired during my recent sojourn in Italy. The approach is my own. The excellence of this book and M. Rosenstock-Franck's earlier one, *L'Economie Corporative Fasciste en Doctrine et en Fait,* 1934, makes one wonder why some American publisher has not put out English editions of these objective studies.

change has a monopoly over all Italian international payments. This agency has branches in all the principal financial capitals of the world. Imports are limited by a licensing arrangement whose purpose is to carry out the autarchic principles of the government. It is estimated that 90 per cent of all imports fall into this category. Of course, exports are encouraged where necessary by means of subsidies, although not to the same extent as in Germany. Another device is the clearing agreements which Italy has made with Germany, England and many other countries. The British-Italian agreement of 1936 requires 70 per cent of Italian exports to England to pay for a like amount of imports from England, while the remaining 30 per cent of Italian exports to England are used to pay for balances due England on past trading. The clearings idea is based on a philosophy of almost pure barter. In Italy's trade with Germany, no gold passes the frontiers; it is all done on the books. This limits the opportunity for triangular and multilateral trade.

Payments due abroad are delayed or paid only in part. The amounts due are kept in blocked accounts. For instance, during the sanctions period of the Ethiopian campaign, balances due foreigners were held by the *Banca d'Italia.* The Germans have used this device even more extensively; and, in these war days, we can note that England and France are following a carefully directed foreign-trade policy. In Italy the hope is that an equal value of Italian goods will be bought. In fact trade treaties often stipulate reciprocal purchases. The blocked account can be made worth less or more by fixing an arbitrary rate of exchange There is no arbitrage, and hence no tendency to equalize these rates. Every transaction must be agreed to by the authorities, with the consequent red tape. This insistence on approval of all transactions, and the consequent delays, interfere seriously with the volume and free flow of trade. Actually Italy's machinery of exchanges requires only 1,250 workers in the office of the Secretary of Foreign Exchange and Trade.[2] To these must be added part of the 650 additional employees of the *Banca d'Italia.*

Autarchy or "streamlined mercantilism" is not entirely popular with Italian merchants. For example, government bureaucrats determine how much meat shall be imported and from what countries it shall be bought. Italian meat dealers of long experience feel that they can buy more wisely at lower prices. Racheli, head of the Confederation of Merchants, claimed in *Il Sole,* July 6, 1936 (Milan financial paper) that autarchy was leading to higher prices for meat, and that "Italian cattle dealers know where to get the most for least." In the case of sorely needed raw materials, the total imported stock is placed in the hands of a large company, a government sponsored body (such as the Cotton or Wool Institute) or another government agency for distribution throughout Italy. It is claimed by

[2] In Germany the exchange bureaucrats are much more numerous.

Rosenstock-Franck[3] that the Cotton Institute makes huge profits from this distributive function. It affords an excellent opportunity for governmental favoritism. The Italian consumer pays a high price for rice, while it is sold abroad at competitive dumping prices. Another device, according to Demaria, has been to conceal dumping, since the devaluation of the lira in 1936, by valuing exports at the old rate (.065 grams of gold per lira), while imports are valued at the new rate (.046 grams).

Further devaluation of the lira is taking place at the present time. The tourist lira which has been selling at about 21 lire to the dollar is now selling at the rate of 23.60 lire. Also, Italian exporters have been receiving a virtual bonus of 20 per cent since February, 1940. For example, instead of receiving 1,976.50 lire[4] for each $100 of foreign exchange, an exporter now obtains 2,360 lire from the exchange authorities.

Italy exports fruits, wine, food pastes, cheese, sulphur and mercury with little difficulty; but her finished goods must be exported at very low or dumping prices. Most of the 1937 trade deficit of 5 billion lire represented payments for raw materials. In tonnage, exports were about twice imports. In other words, Italy sells cheap and buys dear. She exports cotton and woolen goods at the expense of home consumers who get less of these goods or substitutes. The result of these policies is higher internal prices and lower external prices. The exporter is favored. He can buy his raw materials from the proper import board at less than real costs, and hence can sell abroad at a low export price. The producer of similar goods for the home market must pay higher prices (that is, above real costs) for his raw materials, and consequently sells them to the Italian consumer at increased prices.

The wheat tariff which was reduced in 1936 to 18 lire per quintal has no real effect under existing regulations. To equalize the external and internal prices for wheat in 1939, the tariff would have had to be 47 lire per quintal. However, the government controls both the supply and price of domestic and foreign wheat through the wheat pools (*ammassi granari*). The reader may well ask, "Why have such a tariff?" Perhaps it serves to delude the Italians into thinking their domestic price for wheat is not as high as it is. Another purpose may be to mislead foreigners. A further consequence of the government emphasis on self-sufficiency in wheat has been a reduction in pasturage for cattle and a reduction of about 15 per cent in meat consumption from 1934 to 1939.[5] Also, while the policy of more babies may fit in with fascist militarism, it is hardly consistent with autarchy to encourage increases in the number of mouths to feed.

[3] In *Les Etapes de l'Economie Fasciste Italienne,* 1939.

[4] This would be in accordance with the present rate of exchange—19.76 lire to the dollar, or 5.05¢ per lira, which has been in effect since September, 1939, when it was 5.26¢.

[5] The Italians are eating more fish.

The control authorities must decide how much to allot for different purposes within the state, from what countries to buy and to what individual Italian firms the imports should go. Under this system internal prices get out of touch with external prices. The international price equilibrium is destroyed and the competitive power of domestic industries in foreign markets is lowered to the point where subsidies are needed in some cases.

Meantime wheat costs Italy one-third more under autarchy according to Professor Carl Schmidt; synthetic rubber four times as much as natural rubber; domestic cotton three times as much as the imported product; and hemp twice as much as imported jute. In 1936 Demaria claimed Italians had to pay 2,800 lire a ton for lead, a *prezzo corporativo* (corporative price), whereas its actual cost of production was only 2,250 lire a ton. This arbitrary price was handed down by the *Ente di Privilegio* (a term actually untranslatable, meaning a privileged body created by the government, or government control board) in concert with the Office of National Metals under the *Commissariato Generale per le Fabbricazioni di Guerra* (War Industries Board). The authorities were attempting to "stabilize" production with a view to military and commercial needs through an autarchic price policy. The tremendous growth in the use of hydro-electricity has not been an unmixed boon to Italy's program, since it costs industry one lira (5.05¢) per kilowatt hour.

It must be remembered that autarchy is not an essential part of the fascist economic structure. That is, Italy has resorted to a policy of self-sufficiency, only because of international-trade policies and sanctions. The fact that it did not appear until thirteen years after the march on Rome tends to bear this out. It is a common error to assume that totalitarianism and autarchy go together. At present, Great Britain and France are controlling their foreign-exchange rates and foreign purchases. Yet, we could hardly call either country totalitarian. Any country will adopt autarchy and control of the exchanges in times of peace or war, if it seems to be the best policy. There is much careless thinking in this sphere of economics.

II

The new emphasis in Italy's economy has led to revolutionary changes in the banking and credit structure. The *Banca d'Italia,* Italy's central bank, ceased to be a private bank in 1936. The private stockholders were paid off. Its capital was fixed at 300 million lire and the stock is owned by savings banks, banks of public interest (banks completely controlled by the government) and insurance companies. It was brought under closer governmental supervision and control.

"The (Italian) banker has lost all autonomous action and all initiative within the economic picture. He carries on a simple routine which represents a drainage of capital, giving effect to a plan set up by the supreme

authorities." Such is Giovanni Demaria's opinion of fascist banking.

Mussolini rules the credit structure through the triumvirate of Azzolini, Governor of the *Banca d'Italia,* Beneduce, President of the Industrial Reconstruction Institute (I. R. I.), and Riccardi (formerly Guarneri), Secretary of Foreign Exchange and Trade. In line with the general credit reforms in 1936, the government created an Interministerial Committee for Credit, consisting of *Il Duce,* the Governor of the *Banca d'Italia* and the Ministers of Finance, Agriculture and Corporations. The detail work was handed over to the newly created Inspectorate for the Defense of Saving and the Exercise of Credit, presided over by the Governor of the *Banca d'Italia* and including the fifteen counselors selected for three terms. This commission works with the Ministry of Corporations which has the power to approve or reject applications for new productive equipment or addition to old. Any credit needs for these developments are passed on by the Inspectorate. Delays are kept down to one month; and commercial loans may not run for more than a year. The credit authorities created new categories. The Bank of Naples, the National Labor Bank, the Institute of *Santa Paulo di Turino* and the *Monte dei Paschi di Siena* were made "organs of public interest." Banks of national character were designated in some thirty provinces. Three large commercial banks, the *Banca Commerciale,* the *Credito Italiano* and the *Banca di Roma* were placed under complete control of the régime.

The story of how these three powerful banks came under complete sway of the government is typical of how temporary fascist expedients often become part of permanent economic policy. Later the professors of corporate economy supply the new "economic theory" to fit the case. In 1931 the three banks in question were in a bad way. They had accumulated millions of lire of frozen assets, invested in industrial securities of doubtful value. The portfolio of the *Banca Commerciale* of Milan contained shares, once valued at 4 billion lire. The Industrial Reconstruction Institute (I. R. I.), a government loaning agency, came to the aid of Italian banks to the tune of 7½ billion lire, very much as the Reconstruction Finance Corporation in our country invested in newly created preferred stock of weak banks. A fair statement would be that from 1931 to 1935 the Italian government saved the banks and capitalism, but neatly forgot to get out. Italian banks, just as German banks, have always been more involved in the financing of long-time business investment than have American or British banks. The I. R. I. helped industry as well in the dark days of the depression. For example, the S. I. P. (*Societá Idroelettrica Piemontese*), a large hydroelectric combine, was greatly aided by the I. R. I. In the reorganization, Conti, President of the *Banca Commerciale,* became head of the S. I. P. Thus, the banks, helped through the difficult days by the government, have sacrificed their autonomy to the state.

The banking reforms reflect the needs of those days—the war economy, autarchy and resistance to sanctions. Just as the Italian government fell almost accidentally into price control during these times, so it developed nationalization of credit and a hierarchy with which to carry it out. In our own country the depression and the New Deal brought significant banking changes. The new banking laws of this period gave the Administration greater control over credit, money and banking policies, while the R. F. C. loans to embarrassed banks helped keep these institutions alive and gave the government a stake in them.

Perhaps a word is needed to describe the two Italian credit agencies: the I. R. I. and the I. M. I., the Italian Credit Institute (*Istituto Mobilare Italiano*). In the United States we have had just one agency, the R. F. C., that made loans to banks and industry alike. The I. M. I. was formed November 13, 1931, to extend intermediate credit up to ten years in the form of loans to private industry against real estate or other acceptable collateral. Also it could participate in new issues of private industries. Its capital was 551 million lire. In 1933 the I. M. I. extended loans of 200 million lire to *Terni* and 140 million lire to *Italgas,* both of which are controlled by the *Banca Commerciale*. In 1936 the I. M. I. took over both short and long-term loans (ten to twenty years), but in 1937, the I. R. I. again assumed the long-term burden and the I. M. I. went back to short-term credit under the guidance of the *Banca d'Italia*. Both these credit institutes obtained their funds from publicly sold bond issues, guaranteed by the government and tax free, as is the way with government securities the world over.

The I. R. I. (*Istituto per la Recostruzione Industriale*) is actually a state holding company. In addition to helping limping banks, its function has been threefold: (1) to finance industry through 15 to 20-year loans, guaranteed by the government; (2) to take care of the liquidations of industry, and (3) to finance new industry and thus help autarchy. For example, the I. R. I. supplied capital in equal shares with *Pirelli,* the rubber trust, to set up a synthetic rubber company. The profits of the I. R. I. are divided in the following way: 25 per cent to reserves, 10 per cent to training industrial apprentices and 65 per cent to the public treasury.[6] The I. R. I. owns half the capital of the *Finmare,* the holding company that controls all Italian shipping, and the same share of the stock of the *Finsider,* the steel and iron trust.

The concentration of the control of credit in the Inspectorate for Saving and Credit means that all credit problems, even those of the Ministries of Finance and Agriculture are gradually coming under the domination of this powerful committee of the *Banca d'Italia*. Part of its work has been to straighten out the affairs of all credit institutions in Italy. The depression

[6] The government also shares liberally in the profits of the *Banca d'Italia*.

witnessed the disappearance of approximately 25 per cent of the Italian banks through mergers or discontinuance. The governor of the *Banca d'Italia*; as head of the Inspectorate has the power to close weak banks, merge others, order what kind and how much credit to grant and examine all banking institutions. In 1936 there were 353 closings of credit institutions and 106 openings. Thirty-six of these were in districts with no banking facilities. Also a representative of the Inspectorate sits on the consultive committee for new industrial plants. The first task of the Inspectorate was to cure and adjust the whole national credit structure. Its second task, more delicate and constructive, has been to redistribute credit and national savings in such a way that it will develop best the economy of the nation.

In the corporate state the organs mainly responsible for trade are no longer the bank, the stock exchange and the capital market; but, for the major part, the functions of these have been transferred to the central authorities, to the gilds (or corporations) and the *Enti di Privilegio* that regulate the market by using complementary parts of the economy and the "solidarity of the classes," getting rid of the antique banking set-up and cutting out a number of intermediate dealers, markets and commercial institutions. And that constitutes the "new order" in fascist Italy.

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REINVESTMENT AND THE RATE OF INTEREST

The classical theory of investment, as exemplified in the work of Keynes, considers that, *ceteris paribus*, a fall in the rate of interest brings about an increase in total investment. This may be true for net investment but it is not obvious for reinvestment. Unless it is true for both net investment and reinvestment, there does not exist an unequivocal guide for policy. A change in the rate of interest operates on reinvestment by bringing nearer or postponing the *abandonment* and *premature abandonment* of existing capital. An increase in the interest rate tends to increase in general the abandonment of existing capital and also the premature abandonment of those capital goods which are to be replaced by goods of intermediate durability. But though the decision to abandon is hastened by the increase in the interest rate, this does not *automatically* swell the flow of reinvestment. It may or may not. This, however, introduces a range of indeterminacy in the effect of a change in the interest rate on the flow of total investment which calls for further study.

1. It is the purpose of this paper to examine briefly the problem of the relationship between the flow of reinvestment and the rate of interest. Apparently it is tacitly assumed that reinvestment responds to a change in the rate of interest in the same way as net investment, or at least does not behave in such a way as to offset the effect of such a change on net investment.[1] Now, the classical position on the relationship between the rate of investment and the rate of interest may be expressed in the words of Keynes: ". . . if there is an increased investment in any given type of capital during any period of time, the marginal efficiency of that type of capital will diminish as the investment in it is increased . . . the rate of investment will be pushed to the point on the investment demand-schedule where the marginal efficiency of capital in general is equal to the market rate of interest."[2] This implies that a rise (or fall) in the rate of interest, *cet. par.*, will decrease (or increase) the rate of investment; and in an economy which is consuming its capital, this change in the interest rate will increase (or decrease) the rate of capital consumption. But the rate of investment may be taken either *gross* or *net*, *i.e.*, with or without the rate of reinvestment.[3] The rate of reinvestment can be further subdivided into two rates, *viz.*, the rate of reinvestment which arises from replacing existing machines with new ones of the same kind, and that which arises from transferring over to new machines of a different kind. The former kind of

[1] *Cf.*, J. M. Keynes, *The General Theory of Employment, etc.*, New York, 1936, pp. 96-104, where he speaks of new investment either as net investment or as investment equal to the amount of depreciation, without thinking it necessary to indicate that he assumes they move together in the same direction. In fact, he has a tendency to make the volume of net investment depend upon the volume of reinvestment, *e.g.*, pp. 100-104.

[2] *Ibid.*, pp. 136-137.

[3] To distinguish between the two, it is necessary to define what is meant by "maintaining capital intact." This is very difficult to do in real terms, while in monetary terms, net investment may be defined unambiguously on an *ex-post* basis, following Keynes, as the difference between Income and Consumption, *op. cit.*, p. 62, or, following Ohlin, as the difference between gross investment and disinvested capital, *Penningpolitik, offentliga arbeten, etc.*, Stockholm, 1934, pp. 8-9.

reinvestment may be called replacement-reinvestment, the latter, transfer-reinvestment. Hence we have the following identity: The Rate of Gross Investment ≡ the Rate of Net Investment + the Rate of Replacement-Reinvestment + the Rate of Transfer-Reinvestment.

From the point of view of the whole economy it is clear that the important determinant of total income and employment is the rate of gross investment, not the rate of net investment. This is so because the former determines the total activity in the machine-producing industries, while the latter determines only a portion of such activity. In an economy in which capital accumulation is taking place, it is incongruous to assume that fluctuations in the rate of gross investment will be due solely to fluctuations in the rate of net investment. For this would imply that the rate of reinvestment is constant—a highly unlikely situation. It is more congruent with experience to assume that the rate of reinvestment fluctuates.[4] In that case, the rate of reinvestment may vary inversely with the rate of net investment and thus may offset fluctuations in the rate of net investment. That this is not impossible was made clear by Ragnar Frisch in his well known criticism of J. M. Clark's formulation of the effect of the rate of change in demand for consumer goods on the output of capital goods.[5]

If the classical position on the relationship between the rate of investment and the rate of interest is to be valid as a guide for policy, it must apply both to the rate of reinvestment and to the rate of net investment. If the subsequent analysis be valid, it will follow that such a relationship cannot unequivocally be established for the rate of reinvestment and hence for the rate of gross investment.

2. The effect of a change in the rate of interest on the flow of reinvestment is exercised *via* its effect on the willingness of the entrepreneurs to continue using existing machines. This willingness will depend upon the profitability of these machines. Hence, the analysis may be split up into two parts: (a) the effect of a change in the interest rate on the profitability of existing machines; (b) the effect of a change in the profitability of existing machines on the flow of reinvestment. Clearly, if the change in the interest rate *increases* the profitability of existing machines, it will, *cet. par.*, lower the rate of reinvestment. On the other hand, if the change in the interest rate *decreases* such profitability, it does not follow automatically, that this will lead to an increased rate of reinvestment. As we shall see, it may or may not.

Now, one of two things may be meant by the profitability of a machine in use: (1) that we are comparing the return from its use with the return

[4] Though there will be a secular increase in the rate of reinvestment, cyclical fluctuations may also occur.

[5] "The Interrelation between Capital Production and Consumer-Taking," *Jour. of Pol. Econ.*, Oct., 1931, especially pp. 653-4.

if sold for scrap; or (2) that we are comparing the return from its use with the return if it were replaced by another type of machine. Under (1) we are concerned with the timing of the *abandonment* of the machine; under (2) with the timing of the *premature abandonment* of the machine.[6] Hence, one of two things may be meant by a change in the profitability of an existing machine; (a) that it is now more or less profitable to abandon the machine; (b) that it is now more or less profitable to abandon the machine prematurely. To be able to say what the effect of a change in the interest rate is on the profitability of existing machines, it is necessary to investigate its effect on the conditions under which it becomes profitable: (a) to abandon; (b) to abandon prematurely. We shall set down each condition in turn and then study the effect of a change in the interest rate of these conditions.

The condition for abandonment to be profitable is given by the following inequality:

$$1) \qquad I_\omega - O_\omega < rS + (S - S')^{7}$$

i.e., abandonment will be undertaken when next year's rent (the difference between the gross receipts, $I\omega$, and the operating costs, $O\omega$) from the old machine is less than the annual interest on the present scrap value, S, of the old machine, *plus* the rate of depreciation, $S - S'$, of the scrap value of the old machine.[8]

Premature abandonment, on the other hand, occurs even though the machine is producing a greater-than-abandonment rent because the total profit potential is increased by shifting over to some other type of machine. It may come about because of the sooner-than-expected availability of a new type machine or because of an unexpected change in costs causing a shift to a known technique of production.[9] The condition for premature abandonment to be profitable is given by the following inequality:

$$(2) \qquad I_\omega - O_\omega < r(G + S) + (G - G') + (S - S')^{10}$$

[6] The term, *premature abandonment*, is J. M. Clark's. See *The Economics of Overhead Costs*, 1923, p. 191.

[7] This is an adaptation of the fundamental condition given by Hotelling, "A General Mathematical Theory of Depreciation," *Jour. of the Am. Stat. Assoc.*, vol. 20, 1925, p. 345, based on a method of proof suggested by D. G. Champernowne.

[8] S is the scrap value of the machine now; S', its scrap value a year hence; and r is the rate of interest.

[9] It will occur before the condition of abandonment is fulfilled, hence the term "premature."

[10] This inequality is given by the present writer, in an article on "The Premature Abandonment of Machinery," *Rev. of Econ. Stud.*, Feb., 1940. Its proof is as follows: the entrepreneur is faced with a choice of continuing to use his present machine or shifting to a new one. If he shifts immediately, he will receive the present scrap value, S, of the old machine, and G, the present goodwill of the new machine. If he waits one year, he will receive next year's rent, $I\omega - O\omega$, *plus* next year's scrap value, S', *plus* next year's goodwill, G'. Immediate shifting is preferable if $(I\omega - O\omega + S' + G')/(1 + r) < S + G$.

i.e., premature abandonment will be undertaken when next year's rent from the old machine, $I\omega - O\omega$, is less than the annual interest on the sum of the present goodwill, G, of the new type machine, and the present scrap value, S, of the old machine, *plus* the rate of obsolescence *minus* the rate of cheapening of the new type machine, $G - G'$, plus the rate of depreciation of the scrap value of the old machine, $S - S'$.

Now, a rise (or fall) in the interest rate will not cause next year's rent ($I\omega - O\omega$) to fall (or rise) since it will have no effect on next year's gross receipts, but it will cause next year's operating costs, $O\omega$, to rise (or fall) through its effect on the cost of working capital. However, this effect may be negligible. It will not otherwise affect next year's rent from the old machine since that will depend upon (a) the given conditions of demand, (b) the cost of the variable factors, and (c) the technical relationship of output to variable input. In accordance with the usual assumptions used in analyzing the behavior of the single entrepreneur, these factors can be taken as given. We can eliminate the effect of the change in the interest rate on the cost of the working capital by assuming that only the long-term or intermediate rate is changed.[11] It follows that if we wish to study the effect of changes in the interest rate we need study only the right-hand side of inequalities (1) and (2) where the rate of interest enters explicitly. If the effect of a change in the interest rate in a given direction is to increase these *comparison values, cet. par.,* it follows that this will tend to stimulate both kinds of abandonment. For, if with the previous interest rate it was still profitable to use existing machines, it will be less so with the new interest rate. Similarly, if the change in the interest rate lowers these comparison values, this will tend to make the use of existing machines more profitable. The effect on the flow of re-investment will be taken up later.

3. We turn now to study the comparison value of (1). What effect will a change in the interest rate have upon it and hence upon the tendency to abandon existing machines? This involves studying whether:

$$\frac{d}{dr}(rS + S - S') = \left(S + \frac{rdS}{dr}\right) + \frac{d}{dr}(S - S') \gtrless 0. \tag{4}$$

The change in r can be said to be without effect on the scrap value, S, and hence, on the rate of depreciation ($S - S'$) of the scrap value, since they both depend upon the price of scrap prevailing now, and expected to prevail a year hence. The rate of depreciation of the scrap value also depends upon the rate of use of the old machine during the next year. The present

This will yield inequality (2) on rearrangement. By the goodwill, G, of the new machine we mean the present value of the future net incomes to be received from the new machine. This use of the term may be justified since goodwill usually means the difference between capital value and book or cost value.

[11] Since the increase in the cost of working capital lowers the rent, this re-inforces the argument, *a fortiori.*

and future prices of scrap depend upon the state of demand which, for the single entrepreneur, is given.[12] Hence, we may write $\frac{dS}{dr} = \frac{dS'}{dr} = 0$

and it follows that $\frac{d}{dr}(rS + S - S') = S \geqq 0.$

The conclusion then is that an increase (or decrease) in the rate of interest will, except in the case $S = 0$, decrease (or increase) the profitability of existing machines and hence tend to increase (or decrease) the amount of abandonment.

In the case of the comparison value of (2) what we want to know is whether

$$\frac{d}{dr}(rG + rS + G - G' + S - S') \gtreqless 0. \tag{5}$$

As before, we write $\frac{dS}{dr} = \frac{dS'}{dr} = 0$, and also $\frac{d}{dr}(G - G') = 0$, since the latter term depends in the main on the rate of technological progress and the cost of the variable factors of production. But we have a further difficulty here that was not present previously, in that the present goodwill, G, of the new type machine, is explicitly affected by a change in the interest rate. This follows from the fact that G depends in part on the annual depreciation charge and this charge varies directly with the interest rate, *cet. par.* Hence G will vary inversely with a change in r. What we are interested in knowing is how rG varies when r is changed, *i.e.*, whether rG varies in the same or in the opposite direction to a change in r. The conclusion to which we shall come is that for new machines whose *ex-ante* life is, *e.g.*, not in excess of twenty years, a rise (or fall) in r increases (or decreases) rG and hence tends to increase (or decrease) the amount of premature abandonment. To show this, we write G as follows:

$$G = (I_v - O_v - D_v) \sum_{1}^{\beta} \frac{1}{(1+r)^n} \qquad (n = 1, \cdots, \beta) \tag{6}$$

where β[13] is the *ex-ante* or anticipated life of the new machine, and I, O, D, are respectively the annual gross receipts, operating costs and depreciation charges of the new machine, assumed constant per period of time.

[12] If it be assumed that a change in r has some effect on S and also upon S', it will be sufficient for this discussion to take up the case where $rdS/dr < 0$. If a rise in r lowers the value of S, it is extremely unlikely that $rdS/dr + d/dr(S - S')$ would be numerically greater than S. If they are numerically less, as is most likely, then the conclusion in the text holds in this case also, though with weaker force. A change in S would be offset by a change in S', so that in general, $d/dr(S - S') = 0$.

[13] It is assumed that the anticipated life of the new machine is unaltered by a change in the interest rate. For small changes in r this cannot impose a serious limitation on the analysis.

$D_v \sum_{1}^{\beta} \dfrac{1}{(1+v)^n} = C$, where C is the present cost of the new machine, which is given. We wish to study the following expression:

$$\text{(6a)} \qquad \frac{d}{dr}(rG) = \frac{d}{dr}\left[(I_v - O_v)\left(1 - \frac{1}{(1+r)^\beta}\right) - rC\right]$$

$$= \frac{\beta(I_v - O_v)}{(1+r)^{\beta+1}} - C \gtreqless 0.$$

Under what conditions will $\dfrac{d}{dr}(rG) = \dfrac{\beta(I_v - O_v)}{(1+v)^{\beta+1}} - C > 0$?

This will be true if

$$\text{(7)} \qquad \frac{\beta(I_v - O_v)}{(1+v)^{\beta+1}} > C,$$

$$\text{(7a) } i.e., \text{ if} \qquad \frac{\beta(I_v - O_v)}{(1+v)^{\beta+1}} > D_v \sum_{1}^{\beta} \frac{1}{(1+v)^n}.$$

Since $I_v - O_v > D_v$, we write $I_v - O_v = \lambda D_v$, $\lambda > 1$, and (7a) reduces to

$$\text{(7b)} \qquad \frac{\lambda\beta}{(1+v)^{\beta+1}} > \sum_{1}^{\beta} \frac{1}{(1+v)^n}.$$

Since clearly $\beta > \sum_{1}^{\beta} \dfrac{1}{(1+v)^n}$, we need to investigate only $\dfrac{\lambda}{(1+v)^{\beta+1}}$. We can simplify the whole problem by assuming that $\dfrac{\lambda}{(1+v)^{\beta+1}} = 1$, for then certainly $\dfrac{\beta(I_v - O_v)}{(1+v)^{\beta+1}} > C$. λ obviously will vary for each type of machine, but we shall be erring on the side of caution in assuming that its average value is 2.[14] If $\lambda = 2$, then also $(1+v)^{\beta+1} = 2$, and so we need to know the values of r and β, for which this is true. The results are given in the following table.

r	β	$(1+r)^{\beta+1}$
.02	35	2.03989
.03	23	2.03279
.04	17	2.02582
.05	14	2.07893
.06	11	2.01220
.07	10	2.10485

[14] To say that $\lambda = 2$, implies that the operating profit or rent per annum $(I_v - O_v)$ is twice the annual depreciation charge. It would be interesting to investigate for what industries, $\lambda \lesseqgtr 2$.

4. It has thus been established on *a priori* grounds, that an increase in the rate of interest, *cet. par.*, will tend to increase the amount of abandonment of existing machines and will tend to increase the premature abandonment of at least those machines that are to be replaced by new machines of intermediate durability.[15] Similarly, a fall in the interest rate would tend to reduce the amount of such abandonment. But this says nothing about the effect of such abandonment on the flow of reinvestment, the problem in which we are primarily interested. Here our analysis becomes very tentative, and *a fortiori*, our conclusions. What we shall arrive at is a series of alternatives which will throw light on the character of the paucity of the information that is available. Perhaps it will show in what directions we need to supplement the available data in order to arrive at more definite conclusions. It will show, in the words of Milton, "not light but rather darkness visible."

5. Let us first consider the effect of increased abandonment. Increased abandonment need not necessarily mean any reinvestment. It may indicate withdrawal from business. In that case, a higher interest rate lowers the rate of future reinvestment. On the other hand, it may lead to the substitution of new machinery, *i.e.*, it may lead either to replacement-reinvestment or to transfer reinvestment.[16] It is generally accepted that an increase in the interest rate, *cet. par.*, tends to cause a shift to less capitalistic factors of production, but how soon this will occur depends upon the degree of reversibility of the technique of production. If the technique of production possesses a low degree of reversibility, then the increased abandonment of machinery will lead to an increased rate of replacement-reinvestment. In the short run, at any rate, the degree of reversibility must be low, hence we may have the paradoxical situation that an increase in the rate of interest will stimulate the rate of reinvestment in the short run, while it will tend to reduce the rate of reinvestment in the long run when the less capitalistic techniques can be introduced.[17] Since the substitution, whether replacement or transfer, which takes place, would not have occurred but for the change in the interest rate, its immediate effect is to increase the flow of reinvestment, whatever its long-run effects may be.

While abandonment may or may not lead to reinvestment, and if it does

[15] This conclusion is re-inforced *a fortiori*, since we have neglected the effect of $d/dr(rS)$ whose influence is, as we have seen, in the same dirction as $d/dr(rG) > O$.

[16] Thus, a higher interest rate may cause machines to be abandoned for whose replacement financial provision had been completed some time ago, and only now does it become worth while to scrap them. A lower interest rate, on the other hand, would discourage such scrapping.

[17] *E.g.*, by new firms entering the industry. It may be difficult for an existing firm to reverse its technique of production but this would not affect a new firm. The concepts of "short" and "long" run used here are not those customarily used in Marshallian analysis. My short run corresponds to Joan Robinson's "quasi-long period," and my long run to her "true long period." *Vide, Economics of Imperfect Competition*, p. 47.

lead to reinvestment, it may lead either to replacement- or transfer-reinvestment, premature abandonment always leads to transfer-reinvestment. But we are on even shakier ground if we try to lay down any general relationship *a priori,* between the rate of transfer-reinvestment and the corresponding rate of replacement-reinvestment, if no premature abandonment has occurred.[18] Strictly speaking, we should talk of the rate of transfer-investment, for if such transfer-investment exceeds the corresponding amount of replacement-reinvestment, it will include both reinvestment and net investment. But if it does, then this reinforces the argument as to the possible effect of a change in the rate of interest on the rate of gross investment. Whether the rate of transfer-investment does include some net investment, will depend upon the relation of the transfer-investment to the original cost of the existing machine. But here we come up against a fundamental difficulty in that we cannot say, *a priori,* that the rate of transfer-investment is necessarily greater or less than the original book value of the existing machine. A rough index might be furnished by the rate of change in the cost of new techniques if it be accepted that the effect of premature abandonment is to shift to newer techniques rather than to older ones. Thus, if we accept the Schumpeterian view that it is the rate of introduction of "innovations" which causes business fluctuations, then anything which encourages the introduction of "innovations" will cause an upward swing in investment. But this is precisely what a rise in the interest rate may do if the above analysis is valid. Contrariwise, a fall in the rate of interest, by retarding both kinds of abandonment, may tend to reduce the rate of reinvestment.

If we compound the effects of a change in the rate of interest on the rate of reinvestment and on the rate of net investment, we are no longer on the sure ground which the classical position offers. We are now confronted with a range of indeterminacy in which anything may happen. We need more empirical information which may throw light on just the questions which this paper discusses.

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[18] I have dealt briefly and schematically with some of the alternatives in a note on "Premature Abandonment and the Flow of Investment," *Quart. Jour. of Econ.,* Nov., 1939. All we can say is that in general they will never be the same, but may be greater or less.

OIL IMPORT QUOTAS AND "EQUAL TREATMENT"

The trade agreement with Venezuela reduced the United States import tax on fuel oil and crude petroleum by 50 per cent, but limited the quantity of oil which may be imported at the new rate. Shares in the quota were assigned to supplying countries on the basis of United States imports for the first ten months of 1939. Mexico's share in our imports, since the expropriations of March, 1938, has fallen drastically as a result of the boycott of Mexican oil by American companies. The selection in this manner of a base period during which special conditions were unfavorable to imports from Mexico is contrary to the principle insisted upon by the United States in the negotiation of trade agreements with foreign countries. This action weakens the bargaining position of the United States and jeopardizes the principle of equal treatment embodied in the trade agreements program.

Bilateralism in international trade has put a severe strain on the "most-favored-nation" policy, once accepted in principle by all great trading nations. Today the United States is almost alone in its practice of a commercial policy aimed at extending the application of the principle to all phases of trade regulation. Other countries hold that the most-favored-nation principle is limited to tariff treatment, and does not apply to the newer direct controls. But we insist that equality of treatment must be extended to quotas and exchange controls also, otherwise the new devices will nullify equal treatment in tariff rates. Consequently we have insisted that our exporters receive a share in all foreign import quotas *proportional to their share in the imports for a previous "representative period."* This formula as incorporated in the Hull trade agreements refers to customs quotas, which limit imports at special tariff rates, as well as to quotas which establish an absolute limit to imports.

Usually it is the United States which insists upon the principle in order to get a "fair" share in someone else's quota, but there are several instances in which we ourselves have established customs quotas in connection with tariff reductions made in trade agreements. The most recent case is the customs quota on fuel oil and crude petroleum established in the Venezuelan agreement. The import tax on these products has been halved for an amount not exceeding 5 per cent of the total crude petroleum processed in United States refineries during the previous year.

Imports in excess of this customs quota will have to pay the original tax. A subsequent proclamation by the President has assigned shares in the quota to our principal suppliers. Mexico, up to the time of the oil expropriations the source of from 10 to 15 per cent of our oil imports, has received a very small share, and the question arises, have we allocated the oil quotas according to the formula we have demanded of others, or are we scrapping our principle in order to discipline Mexico? The answer is important for the future of a commercial policy based on the most-favored-nation clause.

Specifically, have we discriminated against Mexico by the choice of a base period which can in no way be said to be normal or representative? On the basis of imports for the first ten months of 1939, Venezuela was

assigned 71.9 per cent of the quota, the Netherlands and its empire (for all practical purposes the Dutch West Indies) 20.3 per cent, Colombia 4 per cent, and all other countries, including Mexico 3.8 per cent. The only justification offered for the choice of the base period was that the data were the most recent available. The effect of ignoring considerations as to whether the period was representative has been that, by comparison with any previous period, the shares of Colombia and Venezuela have been increased at the expense of a drastic reduction in the Mexican share.

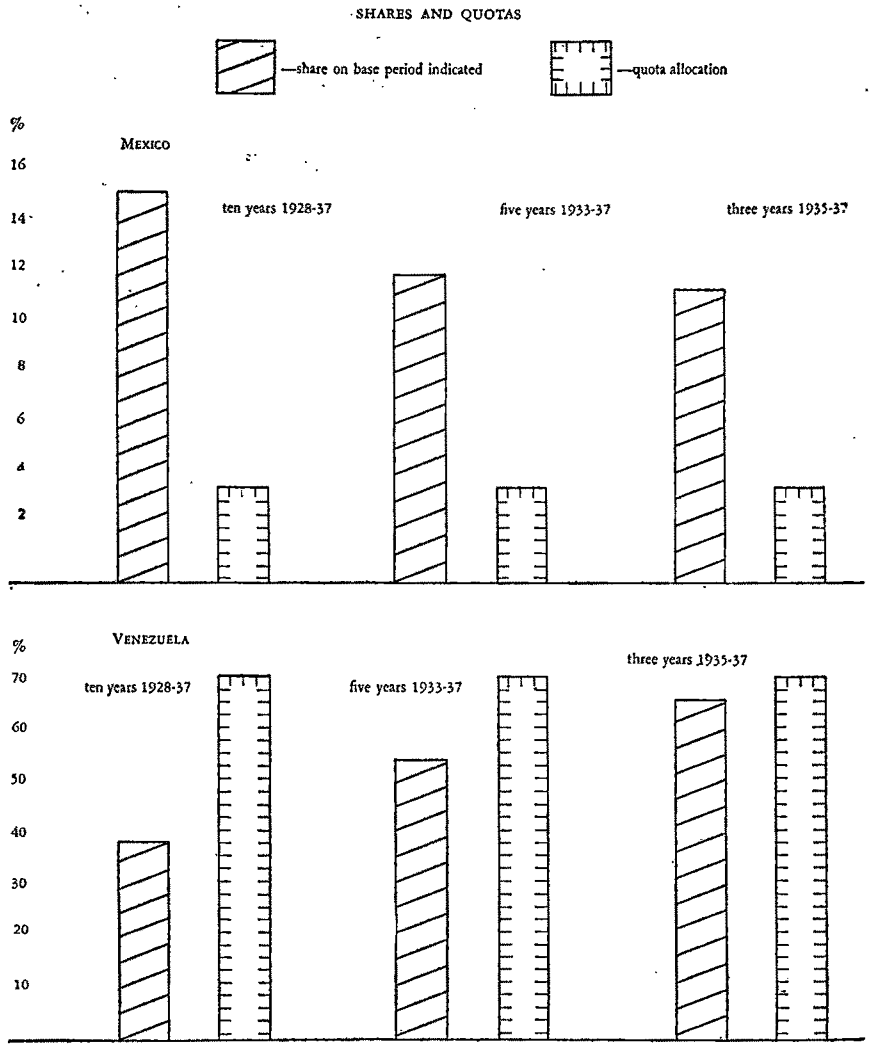
In the early 1920's Mexico supplied almost all United States oil imports, but its share fell off rapidly in the latter years of the decade. From 1929 to the expropriations in 1938 the Mexican share was regularly 13 or 14 per cent with the exception of 1935 and 1937. In 1938, the figure was 5.4 per cent, and it fell further in 1939.

It is clear, therefore, that the base period is one in which Mexico's share was smaller than it had been at any previous time. Calculations for periods of three or five years immediately before 1938 give the Mexican share as from 11½ to 12½ per cent. Even if 1938 is included, the Mexican share is 11 per cent for five years and 10 per cent for three years. The present arrangement, therefore, forces Mexico to divide with other countries a quota which is roughly one-third of its share for any part of the decade before the expropriations. It can hardly be denied that the period following the expropriations has been abnormal. Mexican production and export have been curtailed, owing to difficulties of operation by the government and a shortage of tankers; and United States imports from Mexico have fallen more drastically than those from other countries owing to the boycott of Mexican oil by the expropriated companies.

If resort is had to trends in United States oil imports, as opposed to averages of past periods, there is little change in the conclusions. The rapid fall in the Mexican share during the twenties corresponds with the emergence of Venezuela as a major supplier; the latter country's share rose from 7 per cent in 1926 to 50 per cent in 1934 and 70 per cent in 1938. Since 1929, however, the rise has been at the expense of the Colombian and Dutch West Indian suppliers, while Mexico's share, as already indicated, remained fairly constant. The quota of 20.3 per cent is slightly below the share of the Dutch West Indies during the past two years but is roughly in line with a decline in the importance of this source since 1930 when it supplied 38 per cent of our oil imports. Colombia in 1933 supplied 16 per cent of American imports; in 1937 its share was 1.2 per cent and in 1938 even smaller. The rise to 4 per cent for the first ten months of 1939 is probably to be ascribed to the opening of a new field with American capital and to reduced exports from Mexico.

The statistical evidence is incontrovertible. Entirely apart from the question of whether ten months can be called a representative period for any

economic process, it is certainly not "representative" as regards the sources of United States imports of crude petroleum and fuel oil. Moreover, it is not possible to justify the small quota assigned to "all other countries," which in effect means Mexico, by the examination of recent trends in Mexi-



can oil production or in our imports from that country. There is no evidence that Mexican oil fields are facing exhaustion. In fact, Mexican oil production was steadily increasing in the five years prior to expropriation, and in this period Mexico was supplying a fairly constant proportion (between 13 and 14 per cent) of the oil imported into the United States. The sharp decline to 5.8 per cent in 1938 was the result of expropriation poli-

cies, rather than changes in the underlying technical or economic factors determining oil production or exports.

We are not concerned here with the general policy the United States should adopt toward Mexico. The problems with which the State Department has to deal are many and complex. Buying silver, being a Good Neighbor, protecting the interests of the oil companies, promoting Pan-American solidarity, meeting political needs at home, and having regard to the political situation in Mexico, are some of the elements which combine to determine the direction of our policy. The situation as a whole cannot be weighed and analyzed here. We are concerned only with the allocation of the customs quota on oil, not merely as an aspect of our relations with Mexico, but as part of our commercial policy as a whole. Regardless of whether it is right or wrong, wise or unwise to attempt to force compensation of the expropriated oil companies by applying economic pressure against Mexico, the method used in allocating the oil quota has important general consequences. By violating the principle of "equality of treatment" which is fundamental in the trade agreements program, it weakens our commercial policy. It is less a matter of the conflicting rights of Mexico, the oil companies, and the United States than of the right of the United States to demand equal treatment from other countries if it refuses to mete out such treatment itself.

One of the chief difficulties with the trade agreements program has been the widespread use by foreign countries of discriminatory quotas. In negotiating with countries where such quotas are already in operation little has been achieved except, in some instances, enlargement of the share of the United States. The United States has repeatedly insisted in these agreements that shares in any new quotas shall be allocated to the other contracting party on the basis of ". . . the proportion of the total imports . . . supplied by the other country in a previous representative period, account being taken in so far as practicable in appropriate cases of any special factors which may have affected or may be affecting the trade in that article." (Article VII of the Venezuelan agreement.) The United States has no such contractual obligation to Mexico, it is true, yet the policy of most-favored-nation treatment is certainly capable of application in cases such as this. To depart from that principle as flagrantly as has been done in the case of the Mexican oil quota leaves the State Department open to the charge of using its commercial policy—the ends of which are said to be the revival of world trade and the facilitation of world peace—for covert political ends. The position of the United States in bargaining with other countries with discriminatory quotas is considerably weakened and the moral unity of the Hull program is seriously disrupted.

The statistics are derived from Department of Commerce sources except for those regarding the quotas, which come from the *Bulletin* of the State Department and the 1938 trade figures which are taken from the Tariff Commission's

"Individual Analysis of Principal Commodities Imported into the United States." The import figures[1] cover the following categories:

1920-1934 all crude petroleum, petroleum tops, and fuel oil.
1935-1938 all taxable oil in the same categories.

Oil imports were free until June 21, 1932, when the Revenue act of that year went into effect, levying an import tax of ½¢ per gallon (21¢ per barrel) on imports of oil and its derivatives. Oil for reëxport and that taken on by ships for their own use is not taxable.

Crude petroleum, petroleum tops, and other fuel oil represent from 2/3 to 9/10 of total United States imports of petroleum and its derivatives. When total figures are analyzed the Mexican share—for the period previous to expropriation—remains approximately the same while that of Venezuela drops 20 per cent or more. The tariff concessions apply only to the more limited category.

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[1]SHARES IN UNITED STATES IMPORTS OF CRUDE PETROLEUM AND FUEL OIL
1920-1939
Percentages based on quantities[1]

Year	Mexico	Venezuela	Other countries
1920	99	–	1
1925	90	1.8	8.2
1929	14	34	52
1930	13	28	59
1931	13	29	58
1932	13	38	49
1933	14	37	49
1934	13	50	37
1935	10	63	27
1936	14	70	16
1937	11	64	25
1938	5.4	70	24.6
1939[2]	3.8	71.9	24.3
Base periods[3]			
1928-37	14.9	39.1	46.0
1933-37	12.6	55.0	32.4
1935-37	11.4	66.1	22.5

Source: Calculated from Foreign Commerce and Navigation of the United States; annual volumes; 1938 figures calculated from Tariff Commission, "Individual Analyses of Principal Commodities Imported into the United States."

[1] The figures for 1920 include all imports of petroleum and its products; later figures conform to the title with minor alterations in classification from year to year; 1935 and after only taxable oil is included.

[2] Ten months.

[3] Percentages represent shares in total imports for the period. If the periods are shifted one year so as to include 1938—the expropriations occurred in March—the Mexican share is decreased as follows: 10 years—2.1; 5 years—1.6; 3 years—1.4. The increase in the Venezuelan share is considerably larger in each case, owing to the upward trend of that country's share.

A Note on the Effects of Minimum Wages on the Propensity to Consume

In his article on "Some Effects of a Minimum Wage upon the Economy as a Whole,"[1] Mr. Weir M. Brown argues that a rise in wage rates will increase the economy's propensity to consume through a change in the relative share of wage earners in the distribution of income at the expense of the entrepreneurs. But if it be assumed that entrepreneurs are seeking to maximize their profits and are free to adjust output and price to changes in cost conditions, there is no necessity for an increase in wage rates to result in a change in the relative shares as between wages and gross profits.

For convenience of analysis, let us assume that all prime costs are reducible to labor costs. Then, no change in the relative distribution of income as between gross profits and aggregate wages can take place unless there occurs a change in the ratio between aggregate receipts and aggregate prime costs. Let W equal the wage rate; P, the product price; C, the average prime cost; Q, the physical output; X, the number of laborers employed in producing output Q; and Q', the marginal physical productivity of X laborers. Now the ratio of total receipts to total prime cost will be given by $\frac{P \cdot Q}{X \cdot W}$. But the rate of wages under competitive conditions will be equal to the product of the marginal physical productivity and the price, or $W = P \cdot Q'$. By substitution, the ratio of total receipts to aggregate prime costs will be equal to $\frac{Q}{X \cdot Q'}$, or the ratio of the average physical productivity of labor to its marginal physical productivity. If nothing happens to change this ratio, there cannot be a change in the relative distribution of income as between wages and gross profits, regardless of whether wages are raised or lowered.[2] Since Professor Brown has not shown that an increase in wage rates will bring about a change in the ratio of average to marginal physical productivity, he has not proved that a rise in wage rates will result in a change in the distribution of income as between wage earners and entrepreneurs, and hence in the propensity to consume. This ratio depends upon the nature of the production functions of the industries affected, and can change only when output is altered.[3]

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Elasticity of Demand and a Minimum Wage

Professor Weir M. Brown's analysis, presented in the *American Economic Review* for March,[1] of the effects upon the economy as a whole of establishment

[1] See this *Review*, March, 1940, pp. 98-107.

[2] The same analysis may be applied to the case of imperfect competition in the market for the product, provided the product demand curve is one of constant elasticity.

[3] If the production function is a linear function homogeneous in the first degree, the ratio of average to marginal physical productivity is constant.

[1] XXX: 98-107.

of a minimum wage, seems to me to be deficient in certain significant respects.

The model chosen is a closed economy operating at less than full employment, and with "imperfections in the markets for commodities and for agents of production."[2] The increase in the money incomes of a number of wage earners, Professor Brown argues initially, will increase the economy's propensity to consume. A considerable share of his subsequent argument is based upon the supposition that that increase will occur. However, where demand is not elastic, the argument needs reconsideration.

Suppose that in an industry of imperfect competition, demand for the product of an entrepreneur affected by the law has elasticity of unity. In this case, what will the effects of establishment of the minimum wage be?

First of all, though this entrepreneur will in all probability raise the price of his product, total expenditure by consumers for that product will not change. Further, certain of the consumers may be spending more money for it than before, and others less; and there may be resultant changes in the propensity to consume in individual cases, either upward or downward; but there seems no reason to anticipate any appreciable change in the propensity to consume of these consumers as a group.

What of the persons dependent for income upon the entrepreneur who raised wages, and upon his suppliers? (Hereafter this entrepreneur will be referred to for convenience as Entrepreneur A, and he and his suppliers together as Enterprise Group A.) It is important to note that there will be no change in the total incomes paid out to consumers by Group A. Total wage payments of Entrepreneur A will increase, but certain other of his "A" payments, and his total "B" payments, will decrease.[3] The minimum wage has channelized the same volume of money income into the hands of fewer individuals producing a smaller volume of goods. The greater the price rise, the greater this effect.

However, the reapportionment of incomes between individual income recipients within this group may have important effects. The workers still employed by Entrepreneur A have more income; some individuals receiving their incomes from the suppliers have less income, or none; and the workers discharged by Enterprise Group A have no income. (1) The workers with increased incomes were at the bottom of the income structure, and will probably spend all of the increase. (2) Some of the individuals whose incomes are reduced are probably entrepreneurs or others with larger incomes who will reduce their current volume of saving rather than reduce their spending by the full amount of the decrease in their incomes.[4] (3) Workers discharged by the suppliers may or may not draw upon savings. Those discharged by Entrepreneur A presumably will not, because presumably they have no savings; but, our social institutions being what they are, they will not be allowed to starve. Whether they are supported by public funds secured by borrowing or by taxes, or are supported by private philanthropy, in all probability some of the funds spent for their support are funds which would otherwise have been saved. Thus among the three groups as a whole, there will certainly be increased consumption. The resulting increase in employment somewhere in the economic system may possibly

[2] *Loc. cit.*, p. 100.

[3] A fact which Professor Brown fails to recognize adequately. Only where demand is absolutely inelastic is failure to allow for reduction in "B" payments justified.

[4] Among them may well be Entrepreneur A himself. His proportion of the revenue from the enterprise will not remain unchanged, save by coincidence. Of course, it may increase, with an adverse effect on consumption.

be enough or more than enough, but more probably will be less than enough, to counterbalance the reduced employment within Enterprise Group A.[5]

Finally, what of the effects upon investment? The decrease in output of Group A will tend, of course, to decrease the demand of this group of entrepreneurs for capital goods.[6] On the other hand, the increased demand for consumers' goods suggested in the preceding paragraph will tend to cause expansion of output in certain industries, and hence increased demand for capital goods by those industries. The net total effect on investment will depend not only upon the relative amounts of the respective changes in output, but also upon other specific conditions in the two sets of industries, as well as upon the effect, if appreciable, which the reduction in savings may have upon the market for loanable funds.

The effect direct and indirect on employment of establishment of a minimum wage might thus range all the way from a net increase in employment elsewhere more than sufficient to offset the unemployment created within Group A, to a secondary wave of unemployment elsewhere. The most typical result, if one may hazard a guess, would seem to be that the unemployment created in Group A and in capital goods industries which serve that Group, will be offset in part, but only in part, by increased employment in other consumers' and capital goods industries.

If the demand for the product of an entrepreneur who raises wages has elasticity greater than unity, the effects on employment may be even more adverse. The less the elasticity of demand, the more forceful are the considerations which Professor Brown presents. In introducing the factor of demand elasticity into the argument, I should not like to appear adversely critical of Professor Brown's argument on the whole.[7] His close-knit argument should help to dispel the notion, derived from reasoning based upon inapplicable premises, that minimum wage legislation will invariably decrease employment and lower the level of real income.

EVERETT E. HAGEN

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The Effects of Minimum Wages

There is an argument in Mr. Brown's article on "Some Effects of a Minimum Wage upon the Economy as a Whole" in the March, 1940, issue of the *Review* which seems not to be universally true. The first part of the contention is in regard

[5] It will take more dollars of spending to create a day's employment elsewhere, than it did to create a day's employment previously in the firm of Entrepreneur A, because of the sub-minimum wages paid previously by that entrepreneur. The amount of employment created elsewhere will depend upon the magnitude of the reduction in saving by Group (2) above; the degree of generosity of the relief extended to the unemployed; and the amount of employment which each dollar spent creates elsewhere. This last will, of course, be affected by the wage level and the size of other distributive shares, in the industries from which purchases are made.

[6] I am assuming that the firm directly affected by the minimum wage law is itself a producer of consumers' goods. See Brown, *loc. cit.*, p. 102, note 13.

[7] My own argument in this comment is subject to various subtleties of qualification presented by Professor Brown.

to the probable shift in income to labor from the entrepreneurs as a result of the wage regulation. The second part (the conclusion) of the argument is that investments in the consumers' goods industries will increase as a result of the redistribution of income.

The purpose of this note is to point out (1) that the second part of Mr. Brown's argument does not necessarily flow from the first; and (2) that the *timing* of the introduction of wage legislation is of paramount importance in determining its net effects.

According to Mr. Brown's analysis, the introduction of legal minimum wages will most likely affect the consumption goods industries. First, the wage regulation will result in a shift of income from enterprisers to workers (p. 101). This will lead to an increase in the demand for consumption (or wage) goods. Second, the increased demand for these goods will reflect itself in an increase in the demand for capital to be employed in the consumption trades (p. 102). According to this view the introduction of a general program of minimum-wage regulation is doubly blessed.

Even if we grant the first contention that a generalized program of minimum-wage regulation will act in the direction of redistributing income, the second contention, it would seem, is severely limited by the assumption that the consumption goods industries were operating at, or close to, the point of full economic utilization of existing plant capacity before the wage award was made. Unless this were so, a slight redistribution of income arising out of a small increase in total payrolls would be unlikely to have a sufficiently strong *general* effect on consumption to stimulate greatly investment activity in the consumption goods industries. This negligible effect would be especially true if the wage award were made in a period of depression when the unused available capacity of industry is great. Even though the investment industries are harder hit during bad times, it is clear that the consumption trades are not unscathed.

If, however, the redistribution of income from enterprisers to the poorest paid workers is appreciable, the above reasoning does not apply; for, *ceteris paribus,* the increase in the demand for wage goods might be sufficient to call forth new investment. But here one might question the validity of assuming that other things can remain constant. If there were to be a great increase in the wages received by the poorest paid workers, could one assume that the wages paid to all other workers would remain "frozen"? The N.R.A. and the more recent French experiences show, I think, that even a relatively modest height to minimum wages will tend to push up the *entire* wage structure. The economic effects of generally raising wages in a depressed economy are not likely to be in the direction of fostering investments. A small increase in the total wages bill might increase the demand for investments in *some* wage goods industries. Such an increase, however, would hardly be of very great proportions.

If, at the *onset* of depression, a floor were to be put to the wage structure by means of a minimum-wage law, the unfavorable anticipations of business-men that a widespread deflation of costs and prices was about to ensue might be weakened. If such a wage program succeeded in maintaining the willingness of business-men to invest, the economy might be saved from a costly depression, while the relative share of the national income going to labor might be enhanced.

In a prosperity period the introduction of a minimum-wage program would probably, as Mr. Brown argues, result in a redistribution of income in favor of the laborers, and at the same time would not likely be the sole or most important

factor in raising the whole wage structure, since the normal course of money wages would be upward. Under these circumstances the lowest paid workers would, it should be noted, be better off as a result of the minimum-wage regulation.

From the above analysis it is clear that, for a given economy, the effects of a minimum-wage program depend, in great part, upon the phase of the cycle in which the legislation is introduced,[1] hence few general conclusions are possible.

SIDNEY C. SUFRIN

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Reply to Messrs. Mikesell, Hagen and Sufrin

The analysis of Mr. Mikesell appears formally correct in its setting but irrelevant to my argument, since he has chosen to investigate a situation so completely different from mine. The more fundamental differences are obvious: whereas my model[1] was an economy with imperfect factor and commodity markets and operating at less than full employment, he treats of perfect competition, full employment, and homogeneous production functions. He also assumes the precise and continuous operation of marginal productivity remuneration in its strictest physical version, a condition patently at variance with the hypothesis of my paper. But the extent of other differences I am unable to determine from his exposition. My attention was directed toward the results of minimum wage legislation on the entire system, but Mr. Mikesell deals with product price, the production function, and other aspects of firm equilibrium. The best interpretation which can be given is that—if his argument *is* intended to explain general effects—he refers to some symbolic or summary firm, a sort of weighted average firm. Yet if this firm is to represent the whole economy, surely its appropriateness is vitiated by the other conditions he has posited. The first of these is that all prime costs are labor costs. This is a difficult premise for a macro-economic analysis; it ignores, for example, user costs in the short period. But he further assumes, apparently, that there is but one wage-rate: that all units of the factor labor get the same remuneration. Here lies an inexorable dilemma. If he does *not* make this assumption, then an increase in the low wage-rate will not bring about an equi-proportionate rise in prime costs (even if all prime costs are "labor" costs), and his argument collapses. If he *does* make this assumption, however, he is not discussing a minimum wage situation at all but a generalized wage advance!

It is difficult to leave this note without the opinion that here stands an example of that "reasoning based upon inapplicable premises" which Mr. Hagen, my second commentator, deplores. I concur that the premises are inappropriate; but whether they are inapplicable or not, they were not the premises of the article my critic seeks to attack.

With the comments of Mr. Hagen, on the other hand, I am in general agreement. Certainly his final survey of the possible eventualities (in the last paragraph

[1] I feel that Mr. Brown's analysis of the repercussions of minimum-wage legislation on employment (p. 104) is less than satisfactory. I hope to examine an aspect of this question at some future date.

[1] This *Review,* March, 1940, p. 100.

but two of his note) strongly resembles my own,[2] although we seem to disagree when, as he puts it, we "hazard a guess" as to the direction in which the balance is likely to tip.

I shall restrict myself to three observations. (1) The whole of the adjustment which a firm makes to a change in the cost of one of the agents need not, in an "imperfect" world, take the form of a price-output adjustment, though other responses may temporarily be ignored for purposes of simplification.[3] (2) Mr. Hagen, in working out the effects upon the various groups attached to Enterprise Group A, makes the implicit assumption that the demand curve for the product of Entrepreneur A after the minimum wage is introduced is the same as it was before that time. This is possible, but A's curve is neither more nor less likely to remain unchanged than a demand curve of different elasticity. (3) Finally and most important, the question whether a decrease in employment in firms of Group A will be offset by the increase in that of firms of Group B does not depend solely, as he suggests (note 5), on the fact that a dollar spent for labor will buy fewer labor-hours in B than it had formerly bought in A. It depends also upon whether the number of labor-hours set free in Group A because of its reduced output of product is greater, equal to, or less than the concurrent increase in the number of labor-hours employed by Group B because of its increased output. Thus it is a matter of technological requirements as well as of differential hourly rates whether these employment changes are of equal magnitude.

The points raised by Mr. Sufrin are two. The first, which need not long detain us, seems to reduce to the fact that the induced investment arising from heightened consumption may be small or even negligible in some cases. That is readily conceded. My intention was not to argue that instituting a minimum wage will stimulate the system to intense activity. I was content with showing that its effects on the economy are not inevitably deleterious, as the classical analysis asserted, and may even in some circumstances be in the opposite direction. His second point is that the timing of the introduction of the wage minimum with respect to the cycle is "of paramount importance." The necessity of taking account of the phase of the trade cycle in analyzing any particular wage legislation was recognized and, I thought, made fully explicit in my summarized conclusions (*loc. cit.*, p. 107). Although I am aware of the necessity of considering the cycle and should have liked to give it more attention, there may be a danger of over-estimating the influence of the cycle in determining net effects of a minimum wage.[4] Mr. Sufrin's own discussion does not disclose striking differences in different phases of the cycle, except for a rather special case: that in which the minimum is of considerable height, is instituted during depression, and is rapidly followed by increases in other wage rates. Whether the code regulations of N.R.A. (to which he refers) constitute an instance of a single, uniform minimum wage and whether the N.R.A. situation was sufficiently free from other influences to make induction possible are doubtful questions.

WEIR M. BROWN

Brown University

[2] *Ibid.*, p. 107.

[3] Minimum wage effects upon the individual firm cannot be discussed here, but they are briefly summarized in my article, *loc. cit.*, p. 100, note 9.

[4] I must here point out a fact which seems to have been overlooked—namely, that my article was concerned with a "blanket, uniform minimum wage" (*loc. cit.*, p. 101) applicable to all industries, not with a complex of minimal regulations.

Schumpeter's Theory of Economic Development

Simon Kuznets' article in the June, 1940, issue of the *Review* is the first critical discussion of Professor Schumpeter's *Business Cycles*[1] to appear in American economic journals. In a short time we can expect more reactions on that masterpiece of theoretical and historical economics. But there is one thing that should be mentioned in connection with Kuznets' article and American reaction on Schumpeter's work in general—namely, to distinguish between his business cycle concepts in their narrower sense and his theory of economic change, to give to the theory of economic development a much broader interpretation. For in so doing, we shall be able to use his invaluable contribution in the building up of a theoretical system that would better respond to the reactions of economic reality.

While giving in his first theoretical treatise the reaction of economic reality to a framework of static economics,[2] his second volume gave the foundations of his theory of economic change. With the use of some undeveloped places in Marxian socio-economic theory, he constructed for the first time a logical and acceptable system of evolutive theory. Contrary to the so-called "laws" of development in the Historical School represented especially by older writers, such as Knies, Roscher, Hildebrand, economic evolution has in Schumpeter's work taken a logical and systematic meaning and become a part of economic theory in its narrower sense.[3]

Although there existed an English translation of Schumpeter's book on the theory of economic evolution, it failed to attract the attention it deserved. His new two volumes on *Business Cycles* are actually an elaboration of the materials presented in the German treatise, enriched by invaluable economico-historical materials on cyclical movements and some specialized theoretical work on Kondratieff and Juglar. American economics have in the past been strongly influenced by Marginalismus und Historismus first; then by the reformed marginalism and equilibrium concepts of London and Viennese economists; lately by Keynsian economics; and it would not be surprising if Schumpeter's *Business Cycles* set the mark of a period in the development of economic thought in the United States. However, one of the first conditions would be that his theory of economic development be distinguished from business cycles in their narrower sense, and that all consequences of his concept be accepted, many of which are contrary to the existing structures of equilibrium economics. Otherwise we shall have just "a new contribution" to business cycle theory.

NICHOLAS MIRKOWICH

University of California

Wealth and Welfare

Over a hundred years ago, in *An Inquiry into the Nature and Origin of Public Wealth, and into the Means and Causes of Its Increase* (Edinburgh, 1804),

[1] *Business Cycles: A Theoretical, Historical, and Statistical Analysis of the Capitalist Process*, by Joseph A. Schumpeter, New York, McGraw-Hill, 1939.

[2] *Das Wesen und Hauptinhalt der theoretischen Nationaleokonomie*, Leipzig, 1908.

[3] *Theorie der wirtschaftlichen Entwicklung*, Leipzig, 1912, translated into English under the title *Theory of Economic Development.*

Lord Lauderdale drew attention to the manner in which Adam Smith's identification of wealth with exchange value resulted in wrongful conclusions being reached concerning the public good. The case Lauderdale mentioned was water. He pointed out that a well watered country could be made better off, if Smith's definition of wealth were accepted, merely by making water scarce. Yet, "what opinion would be entertained of the understanding of a man," he asked, who put forward such a proposal?

Lauderdale's work is widely known and the force of his argument is generally admitted, but economists continue to teach on much the same lines as those he assailed.

A considerable literature has grown up in recent years on the subject of welfare, the writings of Pigou being especially noteworthy. With Pigou, economists speak of welfare in terms of economics, including only those items that possess exchange value. This may be sensible enough, on an "other things being equal" basis, providing that the "other things" are not associated with exchange values in such a way that important non-economic satisfactions have to be foregone in order to gain those included in the economic list.

Obviously, however, often this is not the case. Men give up leisure to attend to their business. They sacrifice sunshine and fresh air, to work covered with grime and perspiration in a steel mill or coal mine. They lose delightful family contacts for the society of a shift boss. And, by the simple process of neglecting to take account of the things that are missed while giving weight to those that are enjoyed instead, the economist is able to inform them that they are richer because of these actions. They buy new automobiles and radio sets, with the result that the economist's figures show that their "real incomes" are higher than they would have been if they had preferred sunshine and family contacts to hard work in a mill or mine. But no one seems to have a brief to point out that the satisfactions which they miss, and which the economist does not take into account, are just as "real" as are those included in the impressive tabulations of the economist.

To the writer it seems ridiculous to make a comparison on this basis between the living standards of, say, an Ohio farmer and a Gary steel worker. The farmer has plenty of sunshine and fresh air. He has a garden and a view that in Gary may be beyond price. He works in the bosom of his family. Yet, because little or no value is placed on these things, while the expensive automobile and city improvements that the Gary man gets in their place are counted at a high value, the city worker is shown to have a higher standard of living. Surprisingly enough, both farmer and city-dweller seem to accept the economist's evaluation, so that the former calls for government subsidies while the latter is content to be taxed in order that such assistance can be given. This shows there is something in the view that the world tends to take one at one's own valuation, even when this valuation is manifestly wrong! The same is even truer when people with greater cultural differences are compared, as when the living standard of a northern city resident is contrasted with that of a southern negro or white hill farmer.

Too many economists take the view that their position is above reproach because they have defined their terms carefully and made it clear that they exclude non-economic satisfactions from consideration. But does the general public follow them here? Is it not the case that the uninitiated assume that a comparison of "real incomes" is what its name implies—something that shows which of the various groups included in it is the best off? Legislators clearly take this position, in many cases. Therefore there seems to be a need to place

greater emphasis on the limitations of the current conception of economic welfare.

EDMUND WHITTAKER

University of Illinois

Principles of Economics Prerequisite to Courses in Public Finance

William W. Hewett's article "Teaching Applied Subjects" which appeared in the June, 1940, issue of this *Review* strikes a sympathetic chord in this writer. To make Principles of Economics a prerequisite to courses in Public Finance is a rather common practice to be noted in college catalogues, but the reasons for doing so are sometimes not very obvious or explicitly stated.

This writer's teaching experience has shown that a main cause of poor student achievement in the study of Public Finance arises from poor knowledge of the fundamental principles of economics. Either so much time has elapsed since the student studied economics that the main principles are forgotten or these principles were never adequately understood at all.

In order to indicate to beginning students of Public Finance specific economic principles which they might profitably review, the following list is suggested:

1. Knowledge of the concepts of supply and demand, the elasticity of supply and demand, and the theory of competitive price in order to understand the theory of shifting taxes under competitive conditions.
2. Knowledge of the law of monopoly price to understand the theory of shifting taxes levied on monopolists.[1]
3. Knowledge of the principle of diminishing utility to understand the theory of progressive tax rates and their relation to the ability-to-pay criterion of tax justice.
4. Knowledge of the concept and theory of economic rent to understand the basis for the single tax proposal and modified land taxes.
5. Knowledge of interest rate theory and the capitalization process in order to understand the idea of capitalizing taxes.
6. Knowledge of the fundamental economic meaning of surplus and cost in order to understand the economic effects of taxes levied on different bases.
7. Knowledge of the equation of exchange and the quantity theory of money to understand the possible inflationary effect of governmental borrowing or fiat money financing.

This list probably is not entirely comprehensive, but it should include the main points.

P. G. HUDSON

University of Arizona

Professor Bowman's Review of Value and Distribution

Professor R. T. Bowman's review of my *Value and Distribution,* which appeared in the June issue of the *American Economic Review,* is so inadequate and inaccurate that it calls for brief comment.

[1] The theory of imperfect competition is now being treated in connection with the theory of shifting taxes. See A. G. Buehler, *Public Finance,* McGraw-Hill, New York, 1940, pp. 367-368.

Professor Bowman makes the sweeping generalization that the "general practice" in my book is to "substantiate (*sic*) a given point of view, not by argument, but by assertion." Seldom, even in economic polemics, have I seen such a grossly inaccurate statement. It is not verified by a single reference, or supported by the mention of a single particular case. I do not believe that it can be.

He finds "annoying" what he calls my "practice of establishing the argument by the principle of being on middle ground." I am not sure what he means by "establishing an argument"; but if he refers to my statement that equilibrium "involves a logically tenable position between two extremes" (preface, p. v), he should tell us *why* he is so annoyed. The idea is neither uncommon nor clearly unsound. I hope that he will do so.

In my opinion, it is high time that some of those who accept the superficial doctrines of "opportunity cost," "monopolistic competition," and "price economics," should be both annoyed and disturbed. To this extent, I shall consider Professor Bowman's attitude a tribute to my work.

Finally, he suggests that, if I had been wise, my statement that positive economics enables us, at any given time, to ask, "Whither is the market tending?" and to have a basis for answering, would have been amended by adding the following: It does not "necessarily" (sic) tell "where" the market "really arrives in the world of reality." Would not most of us like to learn whether Professor Bowman really knows of a theory which will really tell him necessarily "where the market really arrives in the world of reality?" (These are his words.)

May I add the opinion that useful book reviews should give us more of specific criticism, and less of vague feelings about being "annoyed" and "disconcerted." Incidentally, a brief word or two about any merits that the book under review may have might be of interest to readers.

I myself am sincerely disappointed in not getting the benefit of any definite criticism, either constructive or destructive. I have had some pretty unsatisfactory book reviews in my day, but never one that told so little about the book.

LEWIS H. HANEY

New York University

General Works, Theory and Its History

Studies in the Theory of Money and Capital. By ERIK LINDAHL. (New York: Farrar and Rinehart. 1939. Pp. 391. $3.50.)

With the appearance of this book, it begins to be possible for economists who lack command of Swedish to form a first-hand impression of post-war Swedish economics; though we still lack English versions of G. Myrdal's fundamental *Prisbildningsproblemet och Föränderligheten* (*The Pricing Problem and Change,* Uppsala, 1927) and of the supplements to the Unemployment Commission Report by G. Akerman, D. Hammarskjöld, G. Myrdal, A. Johansson, and B. Ohlin (1931-34).[1]

Lindahl's book is divided into three parts arranged in inverse order of their evolution. Part 3, "The place of capital in the theory of price" (pp. 271-350), reproduces an article published in Swedish in 1929. It develops a simplified version of the Walrasian system into a "dynamic" model; and for students who do not shy off from Böhm-Bawerkian terminology, it offers a very useful picture of the dimensional problems involved in the transition.

Part 2, "The rate of interest and the price level" (pp. 139-268), embodies "the more important sections of *Penningpolitikens Medel* (*Methods of Monetary Policy*) printed for private circulation in 1929 and published in Swedish in 1930." Like Myrdal's *Monetary Equilibrium* (from which, however, it diverges at critical points), this essay bases itself primarily on Wicksell. In the reviewer's opinion, fairly serious errors grow out of Lindahl's concept of "income" (for households as well as for business firms) as interest on the net worth. Income so conceived has little to do with household activities, and cannot bear all the motivating significance Lindahl places upon it. The doctrine that a reduction of interest will reduce incomes *ex ante* (pp. 162-168) seems to spring partly from this peculiar definition, partly from failure to observe that freedom to replan operations (even subject to a taboo on increasing total input at any date) will raise the present value of anticipated business incomes above the discounted value of the income-stream contemplated before interest fell. This doctrine leads to some curious business cycle analysis.

Part 1, "The dynamic approach to economic theory" (pp. 21-73), offers

[1] Almost simultaneously with this book was published Myrdal's *Monetary Equilibrium* (London, William Hodge, 1939), an English edition of a work published in Swedish in 1931 and somewhat known through its inclusion in F. A. Hayek (ed.) *Beiträge zur Geldtheorie* (Vienna, 1933). See also E. Lundberg, *Studies in the Theory of Economic Expansion* (London, 1937) and B. Ohlin, "Some Notes on the Stockholm Theory," *Econ. Jour.*, 1937. Both Lindahl and Lundberg abstract a good deal of the Swedish literature, as does also B. Thomas in *Monetary Policy and Crises* (London, 1936).

a fascinating newly-written methodological essay on "dynamics," with a very useful "Algebraic discussion of the relations between some fundamental concepts" (pp. 74-136).[2]

Despite some slips in translation—witness the substitution of "produced" for "consumed" in the fourth line of the last paragraph on p. 142—the book is eminently readable. It is both weighty on its own account and representative of a school which Americans all acknowledge they know too little about. No American theorist can afford to neglect it.

ALBERT GAILORD HART

Iowa State College

Oxford Economic Papers. Edited by R. F. HARROD, H. D. HENDERSON, J. MARSCHAK and R. OPIE. Nos. 1-3. (London: Oxford Univ. Press. 1938; 1939; 1940. Pp. 123; 144; 179.)

According to the editors: "This serial publication is intended primarily as a channel for the publication of the results of research work in economics carried on at the University of Oxford, at the Institute of Statistics or elsewhere. Contributions from outside sources will however be considered, and should be sent to the general editor." The word "serial" is used advisedly, since the appearance of the papers is not periodic. The University Press has performed its part in the production admirably. There is an engaging reticence on the part of everyone concerned as to price and as to how the uninitiated public can subscribe.

It is not many years since a disconsolate research student at Oxford could find nothing in the way of calculating machinery other than gigantic logarithm tables kept in the Observatory. This increases the pleasure one takes in paying tribute to the excellent statistical work of the Institute. Although the Oxford Research Group does not handle their statistics with quite the imaginative vigor of Mr. Colin Clark, their work indicates that some of Mr. Clark's prayers (in his prefaces) for material assistance to statistical research have been answered in Oxford. However, one gets the impression that the Oxford economists are still obliged to perform a good deal of unskilled labor—for instance 2,700 slips with numerous entries were sorted without the benefit of Hollerith equipment.

The work falls, with the exception of one purely theoretical article, within the two broad categories of statistical description and empirical verification of economic theory.

[2] The resemblance between parts of this "algebraic discussion" and the reviewer's apparatus in the paper "Consumption Markets" (*Am. Econ. Rev. Suppl.*, 1938, pp. 122-125) does not represent an independent discovery of Lindahl's principles as G. L. S. Shackle is so flattering as to suggest in his review of Lindahl (*Econ. Jour.*, March, 1940, p. 104), but an extension and application of ideas gained from reading an early mimeographed version of Lindahl's work, as the reviewer acknowledged at the time.

The first class includes the extremely illuminating work on the business cycle by Sir William Beveridge and Messrs. Phelps Brown, Shackle and Bowen. However, the descriptive work that interested this reviewer most was the ingenious development of a statistical measure of mobility by Drs. Makower, Marschak and Robinson. Their method uses unemployment insurance statistics, and aims at measuring the incentive of labor to move in response to a given difference in potential economic opportunity between different localities. The study of these authors is supplemented by Goronwy H. Daniel's article on the length of time it takes an unemployed man to make up his mind to move. This article is especially notable for the inclusion of detailed personal histories of some of the typical cases examined. It is salutary to be reminded that the mobility of labor is not the same problem as the mobility of pawns on a chessboard.

Turning now to the articles on verification: Mr. A. J. Brown has made an ambitious and suggestive attempt, by multiple regression analysis, to give empirical content to the Keynsian relations between the interest rate and the quantity of money. Although Mr. Brown would, I think, be the first to deny that his results are more than experimental, his efforts have made a distinct contribution to the "supply" side of the interest problem.

The contributions of the *Papers* which will probably prove of most general interest are the investigation of the Oxford Research Group, by personal interview and questionnaire, into the behavior of competitors in monopolistic competition and into the relation of interest rates to the level of capital-formation. The competition investigation (reported by Messrs. Harrod, Hall and Hitch) is disconcerting for the theorist, inasmuch as their results (if accepted) would indicate that equilibrium even under static conditions is not uniquely determined by present data. The interest rate inquiry (reported by Messrs. Henderson, Meade, Andrews and Sayers) disposes of any optimistic beliefs that interest-rate control can itself determine the level of economic activity, but it leaves one mystified both as to the rôle that interest does play in the economy and as to the crucial question of what in fact does determine the rate of investment. In both these fields the Oxford economists have undertaken a task that is long overdue, and it is hoped that their efforts will excite emulation in this country.

This brief notice has not done justice to the *Papers*. It has shown that a determined and successful attempt is being made by the Oxford economists to achieve a more realistic economics; but it has not brought out the happy combination that has been achieved between individual enterprise and coöperative research.

A. SMITHIES

University of Michigan

Die Grundlagen der Nationalökonomie. By W. EUCKEN. (Jena: Fischer. 1940. Pp. xii, 300. RM. 11.50.)

Every economist has probably experienced moments when he has felt that economic theory does not contribute what it should to the explanation of economic reality. This feeling of a divergence between "theory" and "life" has been noticeable among economists throughout the post-classical period. It gave rise to the historical school, to the institutional school, to the over-emphasis of statistical work, and is also responsible for the fluctuating development of economic theory proper. This problem of the relationship of theory to economic reality is dealt with by Eucken in a forceful book, which has little in common with the usual kind of methodological treatise.

Historians have a special method of their own for dealing with the problem of historical development in all its various aspects. It might seem therefore that economic reality, being but one aspect of historical reality, could be treated only by the same method as history uses. This would mean that theory, in the sense of a system of abstract deductions based on certain assumptions, would be of no use in the explanation of economic history, and indeed the works of most economic historians show no trace of the application of economic theory. How can the antinomy between the nature of economic reality as a part of history and the nature of economic theory as a system of abstract propositions be overcome?

Eucken gives an answer to this question which seems to the reviewer fully convincing. He shows how, by closely observing the facts of economic reality, and by generalizing from them in a manner which is carefully described in the book, we come upon the two main problems of economic theory: The first is to work out, as "ideal types," all the possible forms of economic organization (*Wirtschaftsordnungen*), such as the exchange economy and the planned economy in its various forms. The number of these "ideal types" is limited as Eucken shows, and in reality we always have a mixture of several types. For the exchange economy we have furthermore to find out all the possible marketing situations and all the possible monetary systems. Eucken, partly as the result of his observation of new forms in the recent economic development of Germany, treats the marketing situations differently from the way in which they are usually treated. The possible monetary systems are classified in a fashion similar to the marketing situations. The second problem is to find out what regulates the processes of production and distribution within the framework of each of the possible types of economic organization, *i.e.,* we have to work out a body of economic theory for each of these types. Eucken does not only indicate these problems but gives an outline of the theoretical system he has in mind. Particularly interesting is his treatment of the risk factor

which he gives its proper place in the system. Once we have created this whole apparatus we can turn back to economic reality and set about the task of explaining it. If we want to analyze any concrete economic situation (no matter in what century) we have first to find out what type of economic organization, or mixture of types, existed at that time, and then to apply to this concrete situation the relevant parts of the economic theory appropriate to the type concerned. All this is richly illustrated by examples. Economic theory is then an indispensable tool for the economic historian. The author supports his method of explaining economic reality by criticizing other attempts which have been made (*e.g.*, by the historical school) and pointing out their fundamental weaknesses.

Within this general framework the book contains a great deal of positive economic analysis, is extraordinarily rich in historical illustrations taken from the whole of economic history, and is full of illuminating observations on such things as the nature of economic power, the character of "ideal" and "real types," the influence of vested interests on economics and economists, the nature of "data" in economic theory, the trade cycle and many others.

F. A. LUTZ

Princeton University

NEW BOOKS

BAUDIN, L. *Free trade and peace.* (Paris: Internat. Inst. of Intellectual Coöp., League of Nations. New York: Columbia Univ. Press. 1939. Pp. 87. 75c.)

It is the contention of the author that: (a) economic theory is equilibristic and self-contained. (b) As a result no internal disturbance can be created that is not self-adjusting. Marx was wrong in his over-production–under-consumption theory. The causes for war must come from the outside. (c) Economic activities are only aspects of social life and are not political—but men have a political, *e.g.*, a national, mentality. Therefore outside disturbances such as those of a political nature are possible. The reasoning is contrary to the simplest rules of logic. The first proposition is so constructed that the second and third are excluded at once.

M. Baudin continues that if war is not caused by our economic structure, but by the political characteristics of men which are inborn, the causes of war are proved to be "metaphysical." This seems to be an admission of intellectual and scientific bankruptcy.

So far as the argument against Marx is concerned it appears that the author did not go beyond volume I in his perusal of *Das Kapital.* He accepts as final the static conditions that Marx assumed in this volume. In referring to the second volume, he quotes not the original but Rosa Luxemburg, and this after he has stated that her work "constitutes, in the main, a rigorous criticism of Marxism. . . ." Then in a footnote the source appears to have been not even Luxemburg direct but Laurat's *L'Accumulation du Capital d'après Rosa Luxemburg.* Volume III of *Das Kapital* is forgotten.

ARTHUR ROWLAND BURNSTAN

BELL, S. *Productivity, wages and national income.* (Washington; Brookings Inst. 1940. Pp. xii, 344. $3.)

BYE, R. T. *An appraisal of Frederick C. Mills's The Behavior of Prices. With a rejoinder by Frederick C. Mills, a panel discussion, and a commentary by Read Bain.* Critiques of res. in the soc. sci., ii. (New York: Social Sci. Res. Council. 1940. Pp. xix, 335. $1.)

CORBETT, J. F. and COLVIN, M. *Modern economics.* Rev. ed. (New York: Macmillan. 1940. Pp. 601. $1.80.)

FAIRCHILD, F. R., FURNISS, E. S. and BUCK, N. S. *Economics.* Rev. ed. (New York: Macmillan. 1940. Pp. xxxi, 828. $3.)

KAULLA, R. *Theory of the just price.* (London: Allen and Unwin. 7s. 6d.)

KINGSTON, J. *A lei estatística da demanda do café.* (Rio de Janeiro: Serviço de Publicidade Agricola. 1939. Pp. 75.)

The author of this pamphlet, production statistician in the Brazilian Ministry of Agriculture, first sets out the mathematical and statistical highlights of the demand concept as developed by writers from Cournot to Schultz and then applies the relevant portions to the statistical material relating to Brazilian and "mild" coffees. One interesting result, a regression equation in which the price of Brazilian is positively correlated with the production of "milds," he discards as spurious, and as possibly attributable to faulty data along with the exclusion of variables that may be significant. With respect to general tendencies, he notes that the world demand for coffee is becoming increasingly inelastic, that the amplitude of price fluctuations is increasing, and that there has been a marked leftward shifting of demand since 1926-27. With these points in mind he holds that control schemes should be confined to reducing price fluctuations to within a narrow amplitude of what is believed to be coffee's long-period level.

VIRGIL SALERA

LA VOLPE, G. *Ricerche di dinamica economica corporativa.* (Padua: Cedam Padova. 1938. Pp. 144.)

An attempt to fit the perspective trend of the operations of an industry in a given period (pp. 29-31) into a general governmental scheme prepared on the basis of some broad national aims (pp. 122-124) is the most interesting idea recurring throughout this dissertation. But in this attempt the lack of precision in the basic concepts is shown by a vague nomenclature according to which the term plan is variously used to designate the schemes of production of an individual firm (p. 29), the program of state intervention elaborated by the executive (p. 33), and the projects of self-regulation of production studied by occupational associations and national corporations and until now only scarcely applied (p. 33). Probably the impossibility of describing economic realities in terms of precise concepts is to be imputed to the author only inasmuch as he tries to connect things which cannot be offered in a logical and systematic presentation. In fact, the circumstance to which the author refers—namely, that the trend of corporative economics is directed toward a system of real economic planning—cannot always be reconciled with the changeability of the purposes followed in practice by the organs of the executive. The attempt to hide behind a cloak of theory so many heterogeneous elements does not change the inconsistency of the apparatus created by Mr. La Volpe. As a consequence, the work cannot be used as a guide in the economic interpretation of the actual situation, as one was led to expect from reading the premises of this volume.

FAUSTO R. PITIGLIANI

LYON, L. S., ABRAMSON, V., and others. *Government and economic life: development and current issues of American public policy.* Vol. II. (Washington: Brookings Inst. 1940. Pp. xi, 521-1301. $3.50.)

MACHLUP, F. *The stock market, credit and capital formation.* Translated from a revised version of the German ed., by VERA C. SMITH. (New York: Macmillan. 1940. Pp. xii, 416. $5.)

MOULTON, H. G., EDWARDS, G. W., MAGEE, J. D. and LEWIS, C. *Capital expansion, employment, and economic stability.* (Washington: Brookings Inst. 1940. Pp. xv, 413. $3.50.)

PIROU, G. *Les nouveaux courants de la théorie économique aux Etats-Unis.* Tome II. *L'économie institutionnelle.* 2nd ed. (Paris: Domat-Montchrestien. 1939. Pp. 230. 85 fr.)

ROBERTSON, D. H. *Essays in monetary theory.* (London: P. S. King. 1940. Pp. ix, 234. 11s. 6d.)

SIKES, E. R. *Contemporary economic systems: their analysis and historical background.* (New York: Holt. 1940. Pp. xiv, 690. $3.)

SMITH, A. H. *Your personal economics.* (New York: McGraw-Hill. 1940. Pp. xiii, 651. $1.96.)

In content as well as in style, economics is brought home to the student, both on the juvenile level and on the reasonably foreseeable adult level. Here is a random sampling of the problems the student is prepared to solve: making a personal budget, individual income tax return, buying life insurance, and locating a position. It is a book on consumer economics, but in a broader sense than the term is generally used. It is functional in approach, and avoids the purely abstract, theoretical, or controversial. True, there are a few serious omissions. For example, "Joining a labor union" should find a place in a practical book of economics at least as readily as "Using the stock exchange." Incidentally, as the omission of labor problems indicates, the book leans in the direction of conservatism. But the significant point is that the author has at last produced an economics book for the forgotten lower half, "the slow learners."

An interesting question of curriculum-making arises out of this book. To what extent can and should this "practical" economics replace or supplement the more theoretical or the recent blending of the two? But that is another matter. Suffice it to say that this book blazes the trail on the secondary level, just as was done half a dozen years ago by Tugwell and Hill, by Klein and Colvin, and by Corbett and Colvin, when they borrowed from institutionalism. Teachers of economics have here another proof that the teaching of economics can be made progressive, realistic, and full of personal and "social significance."

CHARLES COGEN

SPAHR, W. E., editor. *Economic principles and problems.* Vols. I and II. 4th ed. (New York: Farrar and Rinehart. 1940. Pp. xix, 572; xviii, 660. $2.50, each vol.)

TRIFFIN, R. *Monopolistic competition and general equilibrium theory.* Harvard econ. stud. vol. lxvii. (Cambridge: Harvard Univ. Press. 1940. Pp. xii, 197. $2.50.)

VINCI, F. *Analisi economiche.* Serie prima. (Bologna: Zanichelli. 1940. Pp. 463. L. 60.)

Economic History and Geography

Mobilizing Civilian America. By HAROLD J. TOBIN and PERCY W. BIDWELL. (New York: Council on Foreign Relations. 1940. Pp. xi, 276. $2.75.)

Somebody in the Council on Foreign Relations must have been psychic when he selected the publication date of this book: May 27, 1940. That was the day after President Roosevelt's "fireside chat" on national defense, and the day before the announcement of the appointment of Messrs. Stettinius, Knudsen, Hillman and others to aid the revived Council of National Defense in the mobilization of industry. With events in the world forcing America to turn its whole economy in the direction of war requirements, a book could hardly be more timely than this one. Yet it is obviously not a pot-boiler. It bears evidence of careful preparation, and, in fact, it had its inception in a series of study group meetings organized nearly two years ago.

Part 1 gives a historical account of the development of plans of industrial mobilization in the United States. It begins with the system improvised during 1917-18 and describes the organization and methods of operation of the War Industries Board and its related agencies. Then it sketches the evolution of industrial mobilization plans in the War and Navy Departments over the last twenty years, concluding with a description of the latest revised plan which—as it happened—was destined to be the last paper project before the launching of real industrial mobilization (in at least the preliminary phases). Part 2 is organized topically. It treats in separate chapters the control of public opinion through propaganda and censorship, the problem of recruiting the armed forces, the mobilization of industrial labor, the mobilization of business, the control of prices and profits, and the economics of procurement planning. The economic sections of the work have been the responsibility of Professor Bidwell.

The chief value of this book to the economist lies in its lucid and well organized presentation of the broad picture of industrial mobilization plans and problems in the United States. It is written for the layman and does not pretend to do more than serve as a general introduction to the complicated technical economic issues that inevitably arise under a war economy where, as Bernard Baruch said, "administrative control must replace the law of supply and demand." The professional economist would like to have more thorough and specific information on many points that are passed over lightly—for example, the exact nature of those combinations of producers that the government "not only permitted . . . (but) practically compelled" during 1917-18 so that it might negotiate for their entire output in one deal. And he will not find any new ground broken in connection with problems of war finance, or procurement of strategic raw materials, or principles of price-fixing (the famous "bulk-line," for example, comes in

for brief mention with no review or appraisal of the literature on the subject). This is said, not in criticism, but merely to indicate the scope of the book, which does well the job it sets out to do—namely, to give the broad, general background of civilian mobilization in America in terms a nontechnical reader can understand. It should be useful, by the way, in undergraduate courses.

EUGENE STALEY

Fletcher School of Law and Diplomacy

A Southerner Discovers New England. By JONATHAN DANIELS. (New York: Macmillan. 1940. Pp. viii, 398. $3.00.)

This book, written in entertaining style by a member of the distinguished newspaper clan of Raleigh, North Carolina, might be called "summer economics." It is largely an account of a series of interviews with all sorts and conditions of New Englanders about their economic affairs. In reading it one is apt for the moment to be confused as to whether a "journalist" is not really a highly peripatetic individual who stays only one day in a place and takes a few snapshots along his route, or is just a man who has some connection with a daily paper. Doubtless *Noah's Book,* upon the publication side of which the author has a chapter, could quickly straighten us out. Yet it must at once be admitted that, so far as we can see, Mr. Daniels' impressions are essentially correct and not too much influenced by preconceived opinions. After all, he confesses to a Yankee strain on one side of his family, he has himself visited these shores before, and, as an experienced reporter, he has been particularly fortunate in his interviewees.

The theme in which the writer is evidently most interested and which is most likely to be of interest also to our members is that of the extent to which the South is really responsible for the chronic depression which has afflicted several New England industries. To this subject, in spite of many tangents and perambulations, he constantly returns as he surveys empty or newly tenanted factories in Manchester, New Hampshire, New Bedford, Fall River, and elsewhere; and with his reflections upon it he bids farewell to the gentle reader. The more painful truths he usually contrives to have expressed by natives or by adopted sons, of whom, by the way, as a result of the "return tide," he finds a considerable number rather actively engaged in business pursuits. But it is easy to see that Mr. Daniels believes, what we have long suspected, that the blame for many of our troubles lies much closer home, and that in so far as southern competition is a factor the problem becomes a national one to be dealt with along the lines of the present Fair Labor Standards act, by raising conditions of labor and of living in the backward areas, rather than allowing them to be depressed where they are now, higher but none too high. It is edifying to have a visiting observer point out to us that the ruthless depletion of the rich timber re-

sources of many parts of New England by an earlier generation left very little for the hurricane of 1938 to damage; that New England capital and enterprise have long had a tendency to seek higher interest and profits in distant parts instead of creating employment at home; that in some of the older enterprises, especially in the textile field, there has been too much reliance upon "traditional skill" and established connections and too much nepotism in management to permit survival in a dynamic world; and that, more particularly in the shoe industry, much of the migration has been to the more rural sections of New England itself where unionism and labor legislation are not much more advanced than they are in the South. The "Yanks" have themselves to thank when they see interlopers, often of Jewish or other foreign birth, coming in to occupy their premises and seemingly able to make a profit where their effete predecessors have failed.

In so far as it is a sectional matter, the remedy, as Mr. Daniels thinks, lies in being good together. There is need for a new leadership, "such men as can help the South come up to New England. Otherwise New England must come down toward the South. We must come at last to a destination in decency which will include the North and South together" (pp. 384, 385).

WARREN B. CATLIN

Bowdoin College

NEW BOOKS

BROWDER, E. *The second imperialist war.* (New York: Internat. Pubs. 1940. Pp. viii, 309. $2.75.)

BUELL, R. L. *Isolated America.* (New York: Knopf. 1940. Pp. xiii, 457. $3.)

Among the broad range of subjects are those dealing with economic nationalism, investments in Latin America, inter-allied debt, and the Hull trade program.

CLARKE, R. W. B. *The economic effort of war.* (London: Allen and Unwin. 1940. Pp. 250. 7s 6d.)

DARBY, H. C. *The draining of the fens.* (Cambridge, England: Cambridge Univ. Press. New York Macmillan. Pp. xix, 312. $5.50.)

——————. *The medieval fenland.* (Cambridge, England: Cambridge Univ. Press. New York Macmillan. 1940. Pp. xvii, 200. $3.)

DAVIS, S. C. *America faces the forties.* (Philadelphia: Dorrance. 1940. Pp. 283. $2.75.)

In this volume a liberal Republican business-man examines the decade of the thirties in order to throw light on the forties. After a survey chapter on the general events of the thirties, Mr. Davis devotes a chapter each to the farm problem old age security, relief, our major stagnant industries (railroads, public utilities, and construction), the effects of the war, unionization, inflation, and taxation, concluding with a chapter on what is likely to occur in the forties. Mr. Davis writes lucidly and illustrates his point with appropriate stories; the factual material is straightforward and well balanced. The book contains all that one would expect an intelligent and well-read business-man to know about the problems discussed.

But unfortunately it does not do much more than that. Mr. Davis is undoubtedly sceptical of theoretical economics; but surely it is not too much to ask that the question "why it (the depression) happened" be answered from other sources than the campaign literature of the Republican and Democratic parties in the election of 1932 or that somewhat more sophisticated causes than "greed" and "fear" be given (pp. 16-19). Mr. Davis is driven to this extreme because, aside from more or less long-run factors such as the reduction in the rate of population increase and the loss of our foreign markets, his basic explanation of our prolonged stagnation is lack of business confidence resulting from the New Deal, and this is not a very satisfactory explanation of the events before 1933. Other statements that will bother economists could be mentioned: "Without our tariff American industry would never have risen to its present greatness" (p. 238); "the displacement of men by machines" and enlarged and highly efficient plant capacity are given as causes of the unemployment of the thirties (pp. 25-26 and 86-88); and borrowing and repayment of debt are treated as increasing or decreasing the money supply of the country without any qualifications regarding the existence of excess reserves (p. 206). There are also various minor errors of a factual character (pp. 232, 248, and 257).

HENRY H. VILLARD

EINZIG, P. *Economic warfare.* (New York: Macmillan. 1940. Pp. x, 151. $1.90.)

Based on the author's *Economic Problems of the Next War,* published early in 1939. Material revised in the light of experience in the first three months of the war.

GRATZ, G., editor. *The Hungarian economic year book, 1940.* (New York: Columbia Univ. Press. 1940. Pp. 162. $2.)

GREBLER, L. and WINKLER, W. *The cost of the World War to Germany and to Austria-Hungary.* (New Haven: Yale. 1940. Pp. 210. $2.50.)

HARPER, L. A. *The English navigation laws: a seventeenth-century experiment in social engineering.* (New York: Columbia Univ. Press. 1939. Pp. xiv, 503. $3.75.)

In this book we have one more examination of the Navigation acts of England passed during the period 1660-96. The author disclaims the intention of dealing with the trade aspects of the law so as to be able to concentrate on shipping—navigation in the strict sense. He thinks of the legislation as an experiment in social engineering rather than just a phase of the larger mercantilism. The ulterior motive is to test the social engineering of an early date so as to have some basis for judging the effectiveness of the New Deal (p. viii).

The thesis of the author is that the Navigation acts of 1660-96 did help promote British ship-operation and shipbuilding during the period up to 1850. Although there were various factors at work, still the legislation did benefit navigation (p. 320). The author holds to "the view that the development of shipping after the adoption of the Navigation Acts does not merely follow the growth of trade" (p. 343). Again, he states that a "positive correlation between the Navigation Acts and the development of English shipbuilding can be clearly established" (p. 358). To him it seems that "the very gradualness of the transition [of English shipyards to supremacy] reflects the legislative influence" (p. 360). And finally comes the summary view that the "evidence demonstrates that they [the Acts] benefited English shipping, seamen, and shipbuilding" (p. 378).

In arriving at these conclusions the author examines the origin of the Acts, their enforcement in England and the colonies, and the results obtained in shipping connections with different parts of the world. He concentrates on English or British shipping at home rather than in the colonies.

It is illuminating to note the analysis (on p. 306) of the decline of Holland's commercial and maritime strength. The factors cited are wars, lack of natural resources, heavy taxes, decentralization of political power, the growth of other countries, and, finally, the English Navigation acts. By the same token, many facts, as is elsewhere accepted, helped build up the trade and shipping of England.

The reader may have some doubts as to whether the author has demonstrated the importance of the Acts. At the same time the reader may have no doubts about the *tendency* of the laws to promote English shipping. The general statistical evidence is scant and inconclusive. In this book there is very little information concerning actual shipbuilding and ship-operation. No private shipping records have been used.

The author has performed a herculean task in studying the laws and their amendments. He has gone far in delving into the administration of the laws. He has made known his general and particular conclusions. He has been frank in stating exceptions and conflicting evidence. The combination of historical methodology and general social science awareness has been scholarly and valuable. Still, the major question of the precise effectiveness of the Navigation acts remains in doubt. We may recall similar instances of uncertainty, such as the corn bounty laws, tariff protection, and the influence of religion on business.

N. S. B. GRAS

HARRINGTON, M. *The populist movement in Oregon, 1889-1896.* Univ. of Oregon thesis ser. no. 22. (Eugene: Oregon State System of Higher Educ. 1940. Pp. 61, mimeographed. 35c.)

HERSKOVITS, M. J. *The economic life of primitive peoples.* (New York: Knopf. 1940. Pp. xii, 492, xxviii. $4.50.)

Professor Herskovits is a distinguished anthropologist who in his own person has had as much field contact with non-literate peoples as any other man today. His specialty has been the negro peoples. He has traced them all the way from the Guiana jungles to the highly developed native civilizations of West Africa. For the economist who does not realize the vast amounts of evidence that exist to show the life of societies and economies organized and operating quite differently from our own, Herskovits will open a new vista.

Yet in the last analysis this book has been able to do no more than point out the existence of the hiatus between the two disciplines and to point out some of the discrepancies between the economist's assumptions about non-pecuniary, non-machine economies and the actualities of primitive production, exchange, and consumption. The fault does not lie with the author. It is rather a challenge to anyone who sees the meagerness of the economic data from primitive society. We have here illuminating chapters on the realities of primitive economic life and problems that show us the universal applicability of a few broad generalities and concepts of economic theory. But anything more remains for future workers.

The author is perhaps most challenging when he tells us why the gap between anthropological and economic science exists. The lack of interest each has shown in the other has led to many complete misunderstandings of

one another's materials and points of view. The result has been an almost complete inapplicability of economic doctrine to primitive conditions. This goes far to support Herskovits in his thesis that economic theory has been developed out of too close observation of a single brand of human civilization and is, as he puts it, the equivalent of a statistical average based upon a single case. Few economists will agree with the "unconventional critic" Herskovits quotes, to the effect that economics is merely the "science of human behavior in an exchange economy based on freedom of contract and property rights approximating the type familiar in western Europe and North America in our own time." But his evidence goes fairly far in support of such a stricture. Yet it is interesting to see, from the same evidence, how well the accepted categories fit the various and widely different institutional frameworks of primitive societies. Most significant, perhaps, for the economist is the way in which forms of exchange fit the particularities of native social organization.

Herskovits believes and goes far to show us that the study of primitive economics can be, not as all too often a mere citation of the supposed development of an often entirely theoretical economic history, but a proving ground for testing hypotheses against the reality of civilizations differing in many and various ways from our own. When such a possibility is realized, the beginning of a fruitful interstimulation of disciplines is not too far off.

CONRAD M. ARENSBERG

JENNINGS, W. I. *A federation for Western Europe.* (New York: Macmillan. Cambridge, England: Univ. Press. 1940. Pp. xi, 208. $2.50.)

KEMMERER, D. L. *Path to freedom: the struggle for self-government in colonial New Jersey, 1703-1776.* (Princeton: Princeton Univ. Press. 1940. Pp. xvi, 384. $3.75.)

LESCURE, J. *Etude sociale comparée des régimes de liberté et des régimes autoritaires (essai d'économie sociale comparée).* (Paris: Domat-Montchrestien. 1939. Pp. 479. 80 fr.)

Professor Lescure gives first a methodological introduction. He then compares the ideologies of the three totalitarian régimes of Russia, Germany and Italy, traces them in their development since their political birth, and notes their ever growing similarity. A general description of the economic equilibria and disequilibria under the liberal and the different authoritarian systems follows, and the way in which the different economies solve their problems is then traced with thorough documentation. The author discusses capital formation, the rôle of the individual enterprise, the place of foreign trade, of money and prices; and he ends with a study of the position of the peasants and workers. M. Lescure shows the similarities between liberal capitalism and the authoritarian régimes which are not always intentional on the part of the latter. The conclusion to which he comes is that the authoritarian régimes necessarily approach the capitalist economy, and that any interference with economic laws hits back in the form of lower wages, lower output and lower productivity. Professor Lescure points out that real wages might have been higher in Germany and Russia had the resources of the nations been diverted toward more productive investments than armaments. Nevertheless his conclusions are, in his own words, "strongly in favor of science and against the systems."

W. F. STOLPER

McLachlan, J. O. *Trade and peace with old Spain, 1667-1750: a study of the influence of commerce on Anglo-Spanish diplomacy in the first half of the eighteenth century.* (New York: Macmillan. 1940. Pp. 265. $3.50.)

Manniche, P. *Denmark, a social laboratory: independent farmers; coöperative societies; folk high schools; social legislation.* (Copenhagen: Gad. New York: Oxford Univ. Press. 1939. Pp. 215. $1.50.)

This excellent little book was, of course, written before the Danes and their social laboratory were turned into an experiment in conquest. The author is the founder and principal of the International People's College at Elsinore. Quite naturally, therefore, the rôle played by the Folk High Schools in the development of the Danish coöperative enterprises is given particular emphasis. One chapter gives a brief but valuable account of the freeing of the Danish peasant from tenancy on the large estates. At present 94 per cent of the agricultural holdings of the country are cultivated by the owners. This transformation was made possible through the voluntary coöperative credit associations which in the twentieth century were substantially subsidized by the national government.

The change in Danish agriculture from grain to livestock farming, which took place in the latter part of the nineteenth century, is attributed both to external and internal factors. An external factor of prime importance was the absence of tariff barriers in England in this period. The chief internal factor was the spirit of self-help expressed through the producers' coöperative societies. These societies are part and parcel of modern Danish agriculture which is based upon the importation and production of raw material for food and the exportation of finished products in the shape of butter, bacon and eggs. For example, 94 per cent of all Danish farmers were members of coöperative dairies in 1934. In 1937 coöperative "bacon factories" accounted for 86 per cent of the number of hogs killed. Farmers' coöperative organizations supply about 40 per cent of all the seed, about half of the foodstuff, and about 40 per cent of the chemical fertilizers. They account for about half of the butter and about one-fourth of the eggs exported.

Coöperation in Denmark was not the result of a theory, but was practically forced upon the farmers by an external factor—namely, dependence upon the foreign market. The economies to be gained from large quantity shipments, the need for regularity of supply and uniformity of quality placed before the small Danish farmer "the choice between handing his produce over to a large commercial firm or joining a coöperative society and thus avoid the middleman's profit." He chose the latter. The virtual absence of class distinction among the farmers and their habit of mixing socially, made joining together in economic enterprises relatively easy to achieve.

The volume also contains an enlightening chapter on Danish social legislation and a case study of a typical Danish town, Elsinore. Numerous attractive and pertinent illustrations enhance the value of the book.

S. A. Anderson

Meade, J. E. *The economic basis of a durable peace.* (New York: Oxford Univ. Press. 1940. Pp. 192. $2.)

Written in 1939. Contains chapters on an international currency, exchange rates, international trade and capital movements, population movements, and raw material supplies. Advocates the establishment of an International Authority.

MENDERSHAUSEN, H. *Four lectures on the economics of war.* Bull. ser. no. 29. (Colorado Springs: Colorado Coll. 1940. Pp. 47.)

Contains a selected bibliography.

NORMAN, E. H. *Japan's emergence as a modern state: political and economic problems of the Meiji period.* (New York: Inst. of Pacific Relations. 1940. Pp. xvi, 254. $2.)

Contains chapters on the growth of capitalism in Japan; industrialism; the agrarian settlement and its social consequences. Deals with the period 1867-1912.

PANCOAST, E. and LINCOLN, A. E. *The incorrigible idealist: Robert Dale Owen in America.* (Bloomington, Ind.: Principia Press. 1940. Pp. 150.)

PERNOT, M., and others. *Les empires coloniaux. Conférences organisées par la Société des Anciens Elèves et Elèves de l'Ecole Libre des Sciences Politiques.* (Paris: Presses Universitaires de France. 1940. Pp. 219.)

REDLICH, F. *History of American business leaders: a series of studies.* Vol. I. *Theory, iron and steel, iron ore mining.* (Ann Arbor, Mich.: Edwards Bros. 1940. Pp. viii, 185.)

The author is professor of economics at Mercer University, Macon, Georgia. His training was obtained in German universities. He is a theorist, not a statistician or historian. His theory is both economic and sociological.

The chief contribution of this book, which is double-columned and planographed, lies in the first chapter, entitled "The theory of the entrepreneur." The rest of the book, largely on the English, German, and especially the American iron and steel industry, sets forth facts but so obviously as experimental material for the theories that we are forced to regard the theories as all-important.

Dr. Redlich reviews the concepts of the entrepreneur. He rejects risk-taker and manager in favor of "the leading figure in the enterprise" who has "the power of definite decision" (p. 8). At this point he takes over the emphasis of Schumpeter—namely, the creative entrepreneur who participates directly in economic development (p. 12). He finds that this creative work lies chiefly in organization and location. Thus, the author is inclined to emphasize the contributions, not the depredations, of American business-men, though he has actually read chiefly the literature of protest and recrimination.

In studying the work of the creative entrepreneur, Dr. Redlich aims at discovering the chief types that have existed in recent generations. He has decided to concentrate on American experience and has discovered a technique which he thinks is applicable and promising, though he has not actually finished the factual spadework. This technique of study is found in the theory of coevals or generations, which, as the author shows, was worked out in Germany by Dilthey and Wechssler. The theory is that generations of men, including entrepreneurs, reflect the influences of their times and create types. As it seems to the reviewer, this theory of coevals belongs more to the biological than the social world. The theory concentrates on like views and methods and ignores differences. Some of the application of this theory to American business is extremely naïve.

The author is unfamiliar with important contributions which would have put him ten years ahead in his studies. He does not learn afresh from life or business but through books and theories. He is making an interesting effort to write an economic history of American business, but has made no contribution to business history directly. He does not deal with policy-formulation in

business, except in the field of organization and location. He finds no interest in management, for reasons which we can only guess. In short, we have here one more effort on the part of the economist to attain through theory the reality of business without studying business.

Dr. Redlich has written a scholarly book which is very stimulating. True, the work is prolix and unfinished, but there is adequate promise of the author's capacities.

N. S. B. GRAS

SHANNON, F. A. *America's economic growth*. Rev. of *Economic history of the people of the United States*. (New York: Macmillan. 1940. Pp. viii, 867. $3.75.)

SILBERNER, E. *La guerre dans la pensée économique du XVI^e au XVIII^e siècle*. Tome VII. (Paris: Recueil Sirey. 1939. Pp. v, 301. 70 fr.)

M. Silberner presents the views on war and peace of some fifty authors from Bodin and Monchrétien to Adam Smith and Jeremy Bentham. The two main sections of the book deal with the "mercantilist" and the "liberal" writers respectively.

In the center of the mercantilist ideas is the state, and the duty of the prince is to make this state as powerful as possible. Wars are a necessary and profitable means to this end as one nation can gain only at the expense of another. No harmony of interest between nations can exist. The well known mercantilist views on the balance of trade, the importance of a large stock of precious metals, the desirability of self-sufficiency all follow from this fundamental premise.

The political basis of the arguments stands out most clearly with Bodin. While in his "Answer to M. Malestroit" he defends most liberal ideas, he advocates foreign wars in his "republic" as the best means of ending the civil wars which then were ravaging France. The argument that war strengthens a nation because it eliminates internal unrest recurs frequently. The economic arguments proper, such as the importance of keeping the nation's money at home, follow also from the same basic assumptions: the gold is needed for warfare.

Contrasted with this essential chauvinism of the mercantilists is the implicit and explicit pacifism of the "liberals." For them the harmony of interest of all nations is a fundamental truth. A war for the sake of obtaining trade is sheer foolishness to them. The forerunners of the physiocrats (*e.g.*, Crucé and Sully) envisage an international organization, and free trade seems to them a good means of achieving eternal peace. The physiocrats themselves consider such an organization unnecessary. If the princes will obey the economic laws (as is in their interest), and rid trade of all its fetters, eternal peace will be assured automatically. It is interesting that the physiocrats insisted that even one-sided free trade is beneficial to a nation.

WOLFGANG F. STOLPER

WESTMEYER, R. E. *Modern economic and social systems*. (New York: Farrar and Rinehart. 1940. Pp. viii, 604. $3.)

WHITTAKER, E. *A history of economic ideas*. (New York: Longmans Green. 1940. Pp. xii, 766. $4.)

WINKLER, J. K. *Five-and-ten: the fabulous life of F. W. Woolworth*. (New York: McBride. 1940. Pp. 256. $2.50.)

YOUNG, J. S., MANNING, J. W. and ARNOLD, J. I. *Government of the American people: an integrated presentation of its political, economic, and social functions.* (Boston: Heath. 1940. Pp. xiv, 830. $3.75.)

Part 8 (pp. 559-682) contains chapters on commerce, transportation, money and banking, land conservation, labor, and public revenue. Part 9 treats of social welfare.

Annuario di studi e richerche. Anno iv, n. 4. (Genoa: Facolta di Economia e Commercio Laboratorio, di Studi Aziendali. 1939. Pp. 410. L. 30.)

Commercial travelers' guide to Latin America. Part iii. *Mexico, Central America and Caribbean Countries.* Trade prom. ser. no. 208. (Washington: Supt. Docs. 1940. Pp. vi, 238. 40c.)

Statistical abstract of the United States, 1939. 61st no. (Washington: Supt. Docs. 1940. Pp. xxiii, 916. $1.50.)

Agriculture, Mining, Forestry, and Fisheries

NEW BOOKS

BAER, M. E. *Pandora's box: the story of conservation.* (New York: Farrar and Rinehart. 1939. Pp. xii, 292.)

There is no doubt that conservation of natural resources in the United States is one of the main problems a conscious economic policy will have to consider in the very near future. M. E. Baer's book is an account of the ways the values of the land are being diminished through the play of natural and human action, and the ways by which those values can be conserved for the lasting use of the generations to come. It is a light and fluently written account meant to reach also the more general reader.

NICHOLAS MIRKOWICH

CATTANEO, C. *Saggi di economia rurale.* Edited by L. EINAUDI. (Turin: Einaudi. 1939. Pp. 338. L. 20.)

On the occasion of the seventieth anniversary of the death of Carlo Cattaneo, an outstanding Italian economist and statesman of the nineteenth century, eight of his essays on rural economics have been reprinted in this first volume of a series about economic culture. The new anthology was edited by Luigi Einaudi, a prominent Italian professor of political and social sciences of our day—a coincidence for which there are political reasons.

PAUL UCKER

COHEN, W. J. *Unemployment insurance and agricultural labor in Great Britian.* Pamph. ser. no. 2. (Washington: Soc. Sci. Res. Council Committee on Social Security. 1940. Pp. 40. 50c.)

DAVIDSON, D. M., JR., and HUMMEL, B. L. *Standards of living in six Virginia counties.* Social res. rep. no. xv. (Washington: U. S. Dept. of Agric. 1940. Pp. 116.)

DAVIS, J. S. *Bulk handling in Australia.* Wheat stud., vol. xvi, no. 7. (Stanford University, Calif.: Food Research Inst. 1940. Pp. 301-364. $1.25.)

DAY, E. L., compiler. *Cotton picking machinery: a short list of references.* Econ. lib. list no. 9. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. 19.)

ELY, R. T. and WEHRWEIN, G. S. *Land economics.* (New York: Macmillan. 1940. Pp. xiii, 512. $4.)

FIELDNER, A. C. *Developments in coal research and technology in 1937 and*

1938. U. S. Dept. of Interior, technical paper 613. (Washington: Supt. Docs. 1940. Pp. 95. 10c.)

GOODSELL, O. E., compiler. *Land classification: a selected bibliography.* Agric. econ. bibliog. no. 83. (Washington: U. S. Dept. of Agric. 1940. Pp. vii, 95.)

HENNEFRUND, H. E., compiler. *The tomato industry in Puerto Rico and Cuba: a short list of references.* Econ. lib. list no. 10. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. 12.)

HUQUE, M. A. *The man behind the plough.* (Calcutta: Book Co. 1939. Pp. xix, 386. Rs. 5.)

In the mind of the Western economist, Indian agriculture and rural life is associated with the phenomena of small peasant tenantry, excessive rents and indebtedness, grinding poverty and unbelievably low standards of living. The present volume, written by the speaker of the Bengal Legislative Assembly and the vice-chancellor of Calcutta University, furnishes ample proof for the correctness of this notion, though it points out that natural occurrences, especially the scarcity of rainfall, or its abundance with ensuing and devastating floods, add much to the permanent calamity and fatalistic attitude of the small cultivator. The most interesting part of the book deals, however, with the history of the present tenancy system reaching back into the Moslem régime and its land-tax collecting machinery. The subsequent establishment of the British rule, the adaptation of the old revenue system to new needs and customs, the transformation of the Moslem tax-collector into a landlord, and the evils which grew out of the failure to safeguard the taxpayer-tenant against abuses, are amply illustrated by lengthy quotations from proceedings of the Indian Legislative Council and other state papers from the nineteenth and twentieth centuries.

Though centered upon the small peasant holder, his farming methods, standard of living and the reasons contributing to his plight, the book contains a vast material pertaining to all phases of Bengalian agriculture. It might, therefore, serve as well for a source book as a treatise of social and rural problems in modern India. A map and an index, containing preferably an explanation of the numerous Indian terms throughout the book, might have added to the usefulness of the volume for foreign students.

RUDOLF FREUND

INNIS, H. A. *The cod fisheries: the history of an international economy.* (New Haven: Yale Univ. Press. Toronto: Ryerson Press. 1940. Pp. xv, 520. $3.50.)

Published as a contribution to the Canadian-American Relations series under the Carnegie Endowment for International Peace, this volume examines the involved relationship of the western North Atlantic cod fishery to the changing economies of the European countries concerned, and to the colonization of the New World and its subsequent changing social, political and economic structure.

Attention was directed to the cod fishery along the North Atlantic coast of the New World by the explorations of Cabot in 1497. He returned to England with glowing accounts of the great abundance of fish; and it was not long before fishing vessels from his native land were operating on the southern and eastern coasts of Newfoundland, even reaching out to the Grand Banks. They were joined by vessels from other Old World countries, and a commercial fishery for cod was well established by 1519. European nations, with supplies of cheap solar salt, such as Portugal and France, that were weak

in agricultural development and had a large Catholic population, became most actively engaged in the Newfoundland fishery. The records for 1577 show that the French had 150 cod-fishing vessels in these waters; the Spanish, 100; the Portuguese, 50; and the English, 15. In the first half of the sixteenth century the fishery resources of the Gulf of St. Lawrence, Newfoundland, and the Banks were explored and in part developed; the technique of the industry was mastered and a financial and marketing organization was built up.

Concurrent with the prosecution of the cod fishery in the New World, colonies were established on shore. Some were temporary like the fish-curing stations which were abandoned each fall at the conclusion of fishing operations. Others were of a permanent character, becoming fishing villages, then towns and cities. In this category were the English and French settlements along the coasts of New England, the Maritime Provinces, and Newfoundland.

For about two centuries after inception of the cod fishery in the western North Atlantic, vessels from England, France, Portugal, and Spain regularly visited these fishing grounds. Then vessels from Spain and Portugal withdrew, and for the next hundred years English and French vessels, both from the Old World and the colonies, shared the fishery alone. After 400 years, this fishery is still the basis of a great food industry, yielding more than a billion pounds annually and supporting vessels from six countries.

The development and growth of this fishery is presented in chronological order, showing the seemingly endless struggle for supremacy in the fishery and in the trade and commerce growing from the fishery. The intricate ramifications of these conflicts in the political and economic life of these countries and their colonies are indicated and supported by detailed references.

The question of fishing rights has been a particularly fertile cause for international disputes, and a better understanding of the importance of the fisheries in international relations, as so forcefully portrayed by Professor Innis, should further the good relations between countries sharing the fishery resources of the western North Atlantic.

SETON H. THOMPSON

IRWIN, H. S. *Impressions of trading in butter and egg futures.* (Washington: U. S. Dept. of Agric., Commodity Exch. Admin. 1940. Pp. 28.)

————. *Survey of butter futures as of August 31, 1939.* (Washington: U. S. Dept. of Agric., Commodity Exch. Admin. 1940. Pp. 36.)

JASNY, N. *Competition among grains.* (Stanford University, Calif.: Food Research Inst. 1940. Pp. xiii, 606. $4.)

This is the second publication in the Grain Economic Series of the Food Research Institute. The director of the Institute says, in the preface, that too little attention has been paid to inter-commodity competition. "This book," he goes on, "deals with such inter-commodity competition, chiefly among the five grains which include all those of major importance except rice. It is concerned with their competition for various uses and for factors of production, under a great variety of conditions and circumstances. It seeks to disclose not only the fundamental factors involved in this competition among the grains and their relative importance, but also the widely varying results as brought about by the combined effect of those factors in the different regions of the temperate zones of the occidental world."

The author compares the five grains, wheat, rye, barley, oats and corn, and ranks them in a series of different rankings, according to a number of different

criteria—consumers' preference, yields, costs, and so on. He displays a wide acquaintance with the literature and handles his job in a competent manner, pointing out the limitations of each ranking as he goes along, and avoiding the numerous pitfalls that lie all about him.

The finished product is a bit difficult to appraise. The book is a good job of synthetic description. It is a new type of study, and the reviewer feels like a consumer confronted with a new and unfamiliar product. I am not sure just what it will be most useful for. I should think it would be useful in classes in economic geography, and as background material for some agricultural economics courses.

GEOFFREY SHEPHERD

JONES, J. H., CARTWRIGHT, G. and GUÉNAULT, P. H. *The coal-mining industry: an international study in planning.* (London and New York: Pitman. 1939. Pp. x, 394. $5.)

This factual study of the post-war experience of the coal-mining industries of Great Britain, France, Belgium, Poland, Germany, Canada and the United States consists of a survey of the efforts made by these countries to deal with the problem of depression in their respective coal industries. The authors, having prepared the work largely under an endowment from the West Yorkshire Coal Owners' Association, are concerned primarily with the British experience, to which half the volume is devoted. The separate studies are brought together only in the reflective summary by Professor Jones in which are discussed the parallel features of the British and American experiments in control. The volume is concerned with the organization of capital, not with that of labor.

Framed in the background of secular decline and industrial depression, the study traces the steps by which competition, as the governor of coal prices and production, has been replaced in each country by some other method of control. In the chapters on the British industry, the operation of the Act of 1930 for regulating "production, supply and sale of coal" and for "reorganization of the coal-mining industry" is made the center of the discussion. In those on the Polish, Belgian and French, the conventions for controlling production quotas and imports are considered; in the Canadian, Dominion control, in the German, the operation of the Syndicate, and in that of the United States, the series of controlling acts from the NRA through the Guffey act and the Act of 1937 are analyzed. The authors, acknowledging their devotion to the principles of competition and laissez faire, show how the forces of depression changed the question in each country from whether competition should be allowed to continue without restriction, to what kind of restriction best suited the needs of the industry.

This volume cuts a narrow path through the tremendous array of problems confronting this industry of strategic importance. It carefully avoids the broader significance of the facts it presents; that is, of the decline of the industry which was in the forefront of laissez faire development and of the passing in it of laissez faire itself. Within the confines that they have established, the authors have produced a modest but a thoroughly commendable study.

WILLIAM R. PABST, JR.

LEONG, Y. S., and others. *Technology, employment, and output per man in copper mining.* Rep. no. E-12. (Philadelphia: WPA, Nat. Res. Project. 1940. Pp. xvi, 260.)

McNeill, J. M., compiler. *Farm tenancy in the United States, 1937-1939: a selected list of references.* Agric. econ. bibliog. no. 85 (supplements no. 70). (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. vi, 160.)

Mangus, A. R. *Rural regions of the United States.* (Washington: Supt. Docs. 1940. Pp. viii, 230.)

Murray, W. G. *Farm appraisal; classification and valuation of farm land and buildings.* (Ames, Iowa: Iowa State Coll. Press. 1940. Pp. ix, 254. $2.25.)

Olcott, M. T., compiler. *The world food supply: a partial list of references, 1925-1939.* Agric. econ. bibliog. no. 82. (Washington: U. S. Bur. of Agric. Econ. 1939. Pp. vi, 164.)

Rochester, A. *Why farmers are poor: the agricultural crisis in the United States.* (New York: Internat. Pubs. 1940. Pp. 317. $2.75.)

Ross, E. J. *Belgian rural coöperation: a study in social adjustment.* (Milwaukee: Bruce Pub. Co. 1940. Pp. xiii, 194. $4.50.)

Toward the end of the nineteenth century, agricultural conditions in Belgium were at their lowest point—antiquated methods, high costs, poor soil, and outside competition. The Belgian farmer was rescued from bankruptcy by means of agricultural coöperation.

From this background, the author proceeds with a thorough examination of the coöperatives, including the Belgische Boerenbond, which is perhaps the largest coöperative organization of its kind in the world.

Shannon, F. A. *An appraisal of Walter Prescott Webb's The Great Plains: A Study in Institutions and Environment. With comments by Walter Prescott Webb, a panel discussion, and a commentary by Read Bain.* Critiques of res. in the soc. sci., iii. (New York: Soc. Sci. Res. Council. 1940. Pp. xi, 254. $1.)

Timoshenko, V. P. and Working, H. *World wheat survey and outlook, May, 1940.* Wheat stud., vol. xvi, no. 8. (Stanford University, Calif.: Food Research Inst. 1940. Pp. 365-402. 75c.)

Vandercook, J. W. *King cane: the story of sugar in Hawaii.* (New York: Harper. 1939. Pp. xii, 192. $2.50.)

Pineapple and cane sugar dominate the economy of the Territory of Hawaii. With approximately $65,000,000 as the annual sugar crop, the islands are one of the biggest producers in the world. Vandercook's monograph is a description of the Hawaiian cane sugar industry in many of its phases and aspects. The book as such covers a variety of subjects: the origins of the industry, man power, water supply, labor conditions, transportation, technological experimentations, manufacturing, land ownership, legislation in regard to the industry, etc.

Nicholas Mirkowich

Wallace, H. A. *The place of farm credit in the national farm program.* Address before Nat. Farmers Union and Nat. Fed. of Grain Coöperatives, at St. Paul, Minnesota, April 27, 1940. (Washington: U. S. Dept. of Agric. 1940. Pp. 17.)

Wheeler, M. E., compiler. *Agricultural relief measures relating to the raising of farm prices—74th Congress, January 3, 1935, to June 20, 1936.* Agric. econ. bibliog. no. 84. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. vi, 75.)

Farm credit legislation: hearings, 76th Cong., 3rd Sess., on H. R. 8748 to reduce permanently the interest rates on federal land bank and land bank commissioner loans; to relieve federal land bank borrowers of stock liability; to place the federal land banks on a self-supporting basis; to refund and guaran-

tee the bonds of such banks; to increase the functions and responsibilities of national farm-loan associations and county committees of farmers; to provide for the adjustment and refinancing of farm-mortgage debts; to limit the institution of foreclosure proceedings and the taking of deficiency judgments; and for other purposes, March 7 to April 5, 1940. (Washington: Supt. Docs. 1940. Pp. 515. 60c.)

Index of research projects. Vols. I-III. (Washington: WPA in collaboration with Nat. Resources Committee and State Planning Agencies. 1938; 1939.)

A useful compendium. Entries include a wide range of human activity. Under economics are entries relating to economic theory; economic conditions and resources; land and agricultural economics; extractive industries; manufactures; transportation and communication; foreign and domestic commerce; marketing; insurance; finance and business organization; labor and employment; coöperatives; public finance; public utilities; population and demography; social problems and social pathology; social adjustments and social agencies.

Raw materials. 2nd ed., based on *Raw materials and colonies.* (New York: Oxford. 1940. Pp. 90. 85c.)

Wool: hearings 76th Cong., 3rd Sess., pursuant to S. Res. 160 (74th Cong.) and S. Res. 278 (75th Cong.), resolutions providing for an investigation of the production, transportation and marketing of wool. Part 2. *Oct. 23–25, 1939.* (Washington: Supt. Docs. 1940. Pp. 383-716. 40c.)

Manufacturing Industries

United States Steel Corporation T.N.E.C. Papers: Comprising the Pamphlets and Charts Submitted by United States Steel Corporation to the Temporary National Economic Committee. Vol. I. *Economic and Related Studies.* Vol. II. *Chart Studies.* Vol. III. *The Basing Point Method.* (New York: U. S. Steel Corp. 1940. Pp. 411; 191; 101.)

Whatever may be said by critics to disparage the motives and activities of the T.N.E.C., it must be conceded that the hearings before this committee have produced prolific source material for the study of economics and of business administration. The management of the United States Steel Corporation utilized the T.N.E.C. hearings as an opportunity to prepare a comprehensive and scholarly treatise on demand, prices, costs, and basing point method in the steel industry. Under the direction of Professor Theodore O. Yntema of the University of Chicago, a group comprised of outside economists and officers and employees of the corporation conducted research and formulated findings. The studies prepared by this group were presented for the record of the T.N.E.C. at hearings on the steel industry held in November, 1939, and January, 1940. The pamphlets and charts so submitted have now been published in the three-volume study being reviewed here.

Volume I contains eleven individual studies. Each of these monographs was presented as a separate T.N.E.C. exhibit but together they comprise a logically developed and scholarly presentation of the nature of price, demand, and costs in the steel industry. On the basis of these statistical

and factual data, which are presented in a fashion to delight the statistician but which befuddled the press and undoubtedly some members of the Temporary National Economic Committee, Professor Yntema's group came to the following conclusions:

1. The demand for steel is relatively inelastic, hence the amount of steel sold is unresponsive to changes in the prices at which it is offered.

2. Fluctuations in general business activity, industrial profits, and business anticipations, rather than price changes, are the major factors which influence the amount of steel produced and sold.

3. Fixed costs, as a percentage of total costs, range from 15 per cent, at 100 per cent of capacity operations, to 57 per cent when operations decline to 10 per cent of capacity.

4. Total costs rise by a constant amount per ton as volume increases.

5. Additional costs per unit of output remain approximately the same regardless of the rate of operations, as long as other factors affecting costs, *e.g.*, wage rates, remain constant. Furthermore, these additional costs are so high in relation to total costs as to preclude substantial reductions in price.

6. Average costs per unit of output are necessarily higher than the additional cost per unit over nearly the entire range of operations of steel capacity. (The findings as to additional and average costs are based on observations covering a range of from approximately 20 per cent to 90 per cent of capacity.)

7. Given the level of wages and other costs in existence, a substantially lower price level for steel in the past ten years would have brought bankruptcy to the industry.

The final conclusion reached is obviously logical if the preceding statements can be accepted. In short, if the elasticity of demand for steel is no greater than unity, if additional costs per unit are constant, if such costs are high relative to fixed costs, then it would be futile for the industry to attempt to increase profits or minimize losses by resort to price reductions.

Business-men and, I think, most economists will accept the demonstration that the market demand for steel products is relatively inelastic. On the other hand, the technical procedure used to prove that the elasticity of demand for "steel" ranges from 0.3 to 0.4 will undoubtedly provoke controversy among statisticians.

Of more significance for the economist is the study of costs. Some tendency toward constant additional costs per unit might be expected on *a priori* grounds since increased output of steel, within a fairly wide range of operations, necessitates the utilization of additional furnaces rather than accelerated operation of units in production. It is the assertion that variable costs per unit not only remain constant but are relatively high in relation

to fixed costs that challenges previous assumptions as to the behavior of costs in this industry.

The critical reader of Volume I may wish to reserve judgment as to the validity of the conclusions with respect to this alleged relation of costs to volume. It is not the opinion of the reviewer that Professor Yntema has used faulty techniques or has misinterpreted his data. It is, however, unfortunate that in his use of the correlation technique he necessarily was limited to a small number of observations and that his cost data cover expenses incurred in producing a multitude of products in numerous plants. It is important that this pioneering effort to examine the nature of costs in this industry should be supplemented by equally scholarly studies of operations in single plants making homogeneous products. Such studies will also present difficulties but the issue is sufficiently significant to call for supporting evidence.

Only brief mention will be made of Volumes II and III. Volume II contains charts and tables based primarily on data taken from the statistical and accounting records of the United States Steel Corporation. Of major interest are the sections on prices and labor. The corporation has published data on mill net prices, freight absorption, breakdown of average delivered price, and on employment and payrolls previously not available to economists or business-men. The value of these records will be immediately recognized by anyone who has ever attempted a study of price or labor problems in this industry.

Volume III is the United States Steel Corporation's defense of the basing point method of quoting delivered prices. For the student of the subject this volume adds no original analysis to the now voluminous literature on Pittsburgh Plus and multiple basing points. The authors do, however, succeed in presenting the complex issues involved with a clarity not always associated with discussions of the basing point method of pricing. Furthermore, diagrams and concrete examples are discussed by the authors in such a manner as to bring realism to a subject which has perhaps too often been treated in an abstract and theoretical vein. In the opinion of the reviewer, this volume has considerable merit and, despite its source, most definitely should not be dismissed summarily as a plea by vested interests.

The management of the United States Steel Corporation is to be commended, first, for its willingness to provide the T.N.E.C. with a wealth of information on the operations of its business, and, second, for its insistence upon a painstaking, scholarly, and competent presentation of this material. These volumes should do much to widen the area in which reasonable men can find agreement on matters which involve the respective rôles of government and business.

SAMUEL S. STRATTON

Harvard University

NEW BOOKS

DENNISON, S. R. *The location of industry and the depressed areas.* (London and New York: Oxford Univ. Press. 1939. Pp. vi, 216. $3.50.)

It is the purpose of this little book to offer techniques for the study of the problems of location of industries, with particular attention to certain industrially "depressed areas" in Great Britain. This matter of location of industries has received increased attention during the last ten years because of urban concentration, the persistence of depression in particular sections, and an increasing sensitiveness to the danger of air raids.

The complexities of problems of location lead Professor Dennison to be sceptical of "general" theories which aim at "explaining all possible variations in location in terms of one set of formal principles." For this reason he puts aside the analytical theories of A. Weber of Germany, as of little value for the study of particular problems. Nor has the descriptive approach to problems of location characteristic of American investigators led to the formulation of an adequate system for the deductive analysis of industrial location. Professor Dennison, therefore, offers no "general" theory, but suggests, instead, that study of *changes* in industrial location may well start with business costs; a chapter is devoted to analysis of studies on the importance of cost of transport in location of British industries. This, with a consideration of certain other factors in location, including some that are non-rational, leads to the conclusion that "there is now a wider range of choice in location than formerly."

The "depressed areas" are examined in terms of industrial location in part 2 of the book. The "drift to the south" of the British industries is shown to be working out through the "decline of old industries and the rise of new." This recognition of the deep-seated origins of the problems of the "depressed areas" raises the question of proper governmental policy. Granted that mere palliatives dealing with the symptoms of depression are shortsighted, what should government do? Should industries be encouraged to return to the particular areas by means of government subsidies, or should these areas be assisted by government to adjust themselves to the loss of their original economic supports and find other means of livelihood? The author offers suggestions, pragmatic in nature, which might well be examined in relation to the problems of our own "depressed areas."

DELBERT R. FRENCH

VAN TASSEL, A. J. and BLUESTONE, D. W. *Mechanization in the lumber industry: a study of technology in relation to resources and employment opportunity.* Rep. no. M-5. (Philadelphia: WPA, Nat. Res. Project. 1940. Pp. xx, 201.)

Census of manufactures, 1939: industry classifications. (Washington: Census Bureau. 1940. Pp. 100. 15c.)

Declaration of principles relating to the conduct of American industry, adopted in the Congress of American Industry, December, 1939. (New York: Nat. Assoc. of Manufacturers. 1939. Pp. 21.)

Deficiencies in hydrologic research. Rep. of Spec. Advisory Committee on Hydrologic Data. (Washington: Nat. Resources Planning Board. 1940. Pp. x, 93. 25c.)

Textile markets: their structure in relation to price research. Rep. of Committee on Textile Price Research to the Conference on Price Research. Price stud. no. 2. (New York: Nat. Bur. of Econ. Research. 1939. Pp. xx, 266. $3.)

This book presents (1) the structure of the textile industries as related to the pricing process and (2) the direction in which economic research concerned with price phenomena might be most effectively undertaken. It is an important contribution, making available considerable information on some textile problems which hitherto have never received adequate treatment.

Part 1 of the book is an analysis of the price characteristics of the eight selected "market" levels in the manufacturing and distribution of textile products. It outlines the scope of each of these market levels; describes marketing practices; indicates representative items to be used by an individual in making independent price studies; discusses quality and grade differentials in each textile family; and enumerates sources of current price and related market data.

The eight market levels surveyed are the raw fiber markets, the processed fiber markets, yarn markets, finished goods markets, fabricated products markets, and wholesale and retail markets. While it might seem to some persons not intimately associated with the textile trades that this delineation of markets is rigid and arbitrary in the light of the varied and complex nature of textile manufacturing and distribution, it may be pointed out that these market levels are based on accepted trade concepts of what constitutes the various marketing levels. Thus they are not a theoretical classification adopted by the Committee.

In part 2 the report outlines the areas for study which, in the Committee's opinion, offer the greatest opportunity for further study of price behavior in the textile industries. The relations of prices to buying movements, to costs, to capacity, and to industrial organization are examples of some of the areas outlined. The Committee has confined its approach to emphasizing issues and relationships rather than suggesting methods of attack or programs of research.

This book should have real day-to-day value to every textile manufacturer and distributor, as well as being an excellent source of reference for those engaged in textile economic research.

STANLEY B. HUNT

Transportation and Communication

The Modern Railway. By JULIUS H. PARMELEE. (New York: Longmans Green. 1940. Pp. xiv, 730. $4.00.)

This volume accomplishes in clear, readable fashion the aim expressed in the preface: "to describe and explain rail transport in the United States, what our railways are, what functions they undertake, and how they work" (p. v). Every phase of railroading is touched upon, including organization, operation, maintenance and finance, as well as rates, regulation, taxation and reorganization. Both internal and external relationships are treated. To designate it as a handbook of railways would be inadequate because of the breadth and profundity of treatment. It is rather, as the author suggests, a condensed encyclopedia. On the other hand, it largely lacks the detached, critical attitude characteristic of other recent standard works in this field. It is a fair, tempered presentation of the railroads' case, describing clearly and concisely the various elements that go to make up the environment in which they work.

In the development of the historical background, however, no inkling is given of the financial juggling that accompanied the formation of some of the big systems; nor are the various abuses which called forth the early, and subsequent, regulatory measures anywhere indicated. The Windom and Cullom Committees are mentioned, but their findings are not. The several federal Acts are enumerated, with brief statements outlining the essential aims of each; but nowhere is there any discussion of the circumstances which provoked those Acts. In treating of the capital structure of the railroads no analysis is included of the funded debt, the largest item of liabilities. And again, the discussion of railroad accounting reveals nothing as to *why* the Interstate Commerce Commission took measures from the very beginning to promote simplification and uniformity. The author contents himself with a description of the present accounting procedure—with excellent results when considered in this light. These instances perhaps merely demonstrate the fact that it is impossible completely to cover railroad transportation in any single volume.

If one approaches this work with the realization that its aim (and method) is essentially descriptive rather than critically analytical, its wealth of authentic information, and clear presentation of what goes into the production of rail transport is borne in on the reader increasingly as he passes through the book. Those who are inclined to easy disparagement of railroad management for lack of imagination or progressive ideas in dealing with their problems will do well to read carefully the chapter on "Operating efficiency." And anyone who wishes to acquaint himself with the problem of competition in transportation today will find the salient facts presented clearly and concisely in the chapter on that subject, together with the succeeding chapters dealing respectively with water transport and highway transport. The question of subsidies is further considered in the chapter on "Taxation and government aid." The government ownership question is interestingly handled, including a brief rehearsal of experience abroad with an earnest presentation of the case for private ownership here. The argument would have been more forceful, perhaps, if the claims for government ownership had been assembled, and then refuted specifically; but the points which are made are well made.

Dr. Parmelee has done a very fine job of presenting a picture of the railroad industry by a railroad man; and the question may properly be asked: who is better qualified to do this? As former Commissioner Meyer says in his foreword, the book represents the railroad point of view, but is not unduly critical of the other agencies, and "deserves to be widely read."

HERBERT ASHTON

Swarthmore, Pennsylvania

The Economics of Transportation in America: The Dynamic Forces in Development, Organization, Functioning and Regulation. By KENT T. HEALY. (New York: Ronald. 1940. Pp. xviii, 575. $4.00.)

Recently there have been published several general treatments of inland transportation. Among these, the present book is distinctive in that it discusses transportation phenomena primarily from the standpoint of causation.

Part 1, in two new and interesting chapters, explains the basic demands for the transportation of goods and of people. Part 2 begins with an analysis of invention and discovery and considers in chronological order the building of the nation's transportation facilities, including highway vehicles, early highways and canals, railways, modern waterways and highways, airlines and airways. The two functional forces of expansion stressed are technological improvement and business promotion. In the construction of railways the author appropriately attaches weight to competitive forces, though he does not give much attention to geographical and political influences.

Part 3, the major portion of the book, deals with costs, pricing (apart from regulation), finance, management, and labor, as controlling elements in transportation. Costs, pricing, and labor receive the most extended treatment. Motor vehicle costs are shown to be relatively high and closely related to variations in traffic. Highway costs tend to be of the readiness-to-serve variety. Railway costs are said to be largely variable rather than constant in nature, as indicated by an analysis of the historical behavior of costs. Here the reviewer would take issue. It is true that costs which are constant in the short run under small increases in traffic tend to become variable in the long run under large increases in traffic; yet it does not necessarily follow that costs are as variable even in the long run as actual expenditures indicate. Moreover, it is an open question as to which concept of cost has been and is most important from the standpoint of practical rate making as well as of the fullest development of our resources. The increasing significance of cost should of course be recognized. The two chapters devoted to the pricing of transportation deal largely, though not exclusively, with railroad rate structures. Only brief reference is made to rate theory. The explanation of rate structures is exceptionally clear and well illustrated. One might suggest that the book would have been better balanced had some of the space given to labor been reserved for such important matters as consolidation, reorganization, and public ownership, which are covered in only a few pages.

Part 4 is concerned, first, with the development, second, with the results of regulation. The review of the development of regulation is necessarily condensed, but well organized. In contrast to some books on transportation, it gives proper attention to the influence of the courts upon the progress

of legislation. An innovation is a chart of the present status of the Interstate Commerce act and a concise explanation of procedure thereunder. With respect to highway transportation, the author is not convinced that regulation has been sufficiently related to the peculiar characteristics of the industry, has been properly differentiated from the railroad pattern. The discussion of the results of regulation is limited for the most part to railroads, because regulation of the other means of transportation has been incomplete and of recent date. Results are treated under the following heads: freight classification and class rates; commodity rates, as measured by coal and sugar rates structures; divisions, passenger fares, and the general rate level; and service, finance, and accounting. Though recognizing the difficulties of appraising results, the author does not hesitate to state his conclusions. Among the generalizations of interest may be mentioned these, which refer to the accomplishments of the Interstate Commerce Commission: Aside from the overhauling of percentage relationships, classifications formulated by the railroads have not been greatly disturbed; class rate structures remain very much as fixed by the carriers; key commodity rates have been established by management without much interference; except recently, regulatory control of passenger fares has been negligible; with some qualification for the period before the World War, the decisions of the Commission with respect to the rate level have been realistic, and cannot be charged with the failure to earn as liberal returns as expected; and control over service, finance, and accounting has not unduly infringed upon the sphere of management. In general, one may agree with these conclusions, with the proviso that regulation by the Interstate Commerce Commission has not been quite as negative as perhaps unconsciously implied.

Though the author does not so state, it may be presumed that this book is designed largely as a text for college courses in transportation. For this purpose it will doubtless receive considerable recognition, if not as a basic text, at least as one of several references. In the opinion of the reviewer, however, the book suffers for textual use from an inherent weakness imposed by the viewpoint adopted—namely, the absence of thorough, critical consideration of leading problems of transportation. Such consideration is vital to the stimulation of interest, reasoning power, judiciousness, and understanding on the part of students. These matters should not be left solely to the instructor. A less serious drawback is the omission of the usual convenient references at the end of chapters.

TRUMAN C. BIGHAM

University of Florida

Public Aids to Transportation. Vol. I. *General Comparative Analysis, and Public Aids to Scheduled Air Transportation*. Vol. II. *Aids to Railroads and Related Subjects*. Vol. III. *Public Aids to Transportation by*

Water. Vol. IV. *Public Aids to Motor Vehicle Transportation.* (Washington: Supt. Docs. 1940. Pp. xiv, 171; xi, 317; iii, 330; x, 316. 60c. each vol.)

This is a profound and scholarly study of an important subject. Great care has been taken in the collection and analysis of a wide variety of data dealing with every phase of the question. Each of the four volumes is given over to the analysis of the extent of public aid accorded one of the four types of transport—namely, air, railroad, water (inland and coastal), and highway. The first volume, which deals with air transport, also contains an excellent summary of the whole study.

The analysis of the aids given by the several divisions of government to the different agencies of transport includes also an appraisal of the cost to the public compared with the social benefits derived by the nation from the services rendered by the respective agencies. Mention is likewise made of "the other side of the picture" involving the social cost of railroad overbuilding and early abuses, with consequent bankruptcies and resulting distress. In the case of motor transport it is pointed out that the fly-by-night and itinerant operators tend to disorganize markets and disrupt established rate schedules. Subsidized water carriers have also disrupted rates, and disturbed the economic balance by benefiting chiefly local areas immediately contiguous to the water lines.

Two questions are presented: (1) What can be done to relieve the present chaos? (2) What should future policy be? No definite conclusions are reached in answer to either of these questions. With respect to the first, four possible lines of attack are considered: (1) lessen or eliminate aid now being received by certain carriers; (2) lighten certain burdens of the railroads, *i.e.,* their tax load, or non-productive expenditures; (3) allow the railroads to take greater advantage of aids given other forms of transport; (4) give the railroads new public aid. In answer to the second question it is suggested that more attention should be given to the broader aspects of national interests, as opposed to sectional or merely local benefits, in appraising proposed projects. Further study is urged.

The analysis of aids to air transport is relatively brief. It is divided into two sections, dealing with air-mail payments, and "other" aids, having to do with the construction and maintenance of airways and airports.

Volume II, which deals with aids to the railroads, is divided into three parts. Part 1 contains the analysis of aids to the roads, which is developed historically from the beginning. Part 2 contains an analysis of railroad taxation, including a comparison with taxes paid by other industries. A disproportionate tax burden on the railroads is indicated. Part 3 deals with non-productive expenditures required of the railroads, which are treated as an offset to the aids given.

Volume III deals with water transport. It is also divided into three parts.

Part 1 contains the analysis of public aids. Part 2 consists mainly of an analysis of the operations of the Inland Waterways Corporation, and establishes the fact of a net deficit. Part 3 deals with the operation of the Panama Canal.

Volume IV covers highway transport. The analysis includes the determination of the cost of building and maintaining our road system, the allocation of this cost among the various classes of highway users and other beneficiaries, and finally, a comparison of the payments made by the highway users with the costs allocated to them, by classes. It is found, according to the formulas used, that the payments made by users in the aggregate slightly over-balance the costs allocated to them, thus indicating no net public aid, though this is not true for all classes.

Because of the obvious dependence of the results on the original bases upon which the allocations of costs are made, consideration is given to six possible bases, including the method employed by the so-called Railroad Committee (Messrs. Breed, Downs, and Older). The wide divergence between the result obtained by that committee and the present study is considered in some detail. The high competence of those responsible for each of these reports demands that the underlying formulas used in each be given careful study. The fact that the method of the present study produces a result more favorable to the highway users than is true of any other of the bases considered will, no doubt, receive critical attention. Moreover, in the allocation of costs between motor vehicle classes the formula used here is easier on the larger vehicles than any of the other formulas with which it is compared. Some of the criticisms of the "Railroad Report" lack force. It is suggested (vol. IV, p. 295) that the best test of whether or not the $10,000,000,000 of highway costs between 1921 and 1932 (which were not covered by user payments according to the "Railroad Report") constitute a subsidy is to ask whether it would have been possible to raise this amount from motor vehicle users. This is, of course, beside the point, and is inconsistent with the attitude taken in the rest of the study. It would be equally justifiable to raise this question with respect to the land grants to the early railroads. In neither case is it a valid argument. But there are other more cogent arguments given; and a careful reading of this section of the study is essential to a thorough understanding of the issues involved.

There is a wealth of valuable material and sober comment in this study, which is well worth the attention of every student of our transportation problem. The general objectivity, and scrupulous respect for facts shown here is too rare at present, even in some corners of the government service.

HERBERT ASHTON

Swarthmore, Pennsylvania

NEW BOOKS

COLVIN, E. M., compiler. *Transportation of agricultural products in the United States, 1920—June, 1939: a selected list of references relating to the various phases of railway, motor, and water carrier transportation.* Part iii. *Index to parts i and ii.* Agric. econ. bibliog. no. 81. (Washington: U. S. Bur. of Agric. Econ. 1939. Pp. 566-812.)

FREDERICK, J. V. *Ben Holladay, the stagecoach king: a chapter in the development of transcontinental transportation.* (Glendale, Calif.: Arthur H. Clark. 1940. Pp. 334. $6.)

The Holladay Overland Mail and Express Company, owned and operated by Ben Holladay, maintained a regular schedule of transcontinental stagecoach service between the East and the West during the Civil War, its main line running from Atchison, Kansas, to Salt Lake City, with branch lines to Colorado, Nebraska, Montana, and the Pacific Northwest. It supplied communication with isolated communities at a time when the United States were threatened with disruption and when the conquest of the Western frontier was at stake.

The original records of the company were destroyed in the San Francisco fire of 1906; and the present account is based on research among newspapers and periodicals of the period, family papers, and interviews with former employees and Holladay descendants.

SMITH, E. D. *Station to station airline traffic survey.* (Washington: Civil Aeronautics Authority. 1940. Pp. 210.)

An analysis of the flow of airline revenue passengers and air mail on all flights operated by the 16 scheduled United States domestic air carriers during the month of August, 1939, is presented in this traffic survey for the first time. Fundamentally, the work is divided into four principal parts: (1) the passenger and mail maps of the United States and of the New York-Chicago region, portraying the variation in the density of traffic flow throughout the country; (2) the statistical tables presenting the detailed characteristics of each flight of each carrier, as well as the characteristics of the 179 air stations; (3) population, railroad, and highway maps giving comparisons with other modes of transportation, and acting as an aid to new air traffic analyses; (4) the 89 seasonal indexes, 12 relating to United States totals, the remaining for certain principal routes. Adequate textual material fully explains the composition and use of each part of the study.

The basic data for the survey were supplied by the Post Office Department and the 16 scheduled air carriers. Essentially this work is a reference volume for air transport managers and students; it has been constantly used as basic background material by the Authority in all its rate, merger, and certificate of convenience and necessity cases since January, 1940, as well as by the airlines and others interested in the flow of air traffic since April, 1940.

Financing highways in Colorado. Bus. stud. no. 96, issued concurrently as pamph. no. 22 of City Club of Denver. (Denver: Univ. of Denver Bur. of Bus. and Soc. Research. 1940. Pp. 20.)

Investigation of railroads, holding companies and affiliated companies. Hearings, part 23. *Associations related to railroads.* (Washington: Supt. Docs. 1940. Pp. xxvi, 9965-10690.)

Investigation of railroads, holding companies and affiliated companies. Additional report of the Committee on Interstate Commerce. Railroad combination in the

eastern region. Part 3. *1924-26.* (Washington: Supt. Docs. 1940. Pp. lv, 1179-1954.)

Railroad reorganization. Hearing, 76th Cong., 1st Sess., on S. 1869, to protect interstate commerce from the dangers of unsound financial structures and to establish improved procedures and standards for financial rehabilitation of railroads engaged in interstate commerce, and for other purposes. Part 2. *Supplemental statements, letters, and exhibits.* (Washington: Supt. Docs. 1939. Pp. 284. 35c.)

Railways of the United States: their plant, facilities, and operation. (Washington: Bur. of Railway Econ. 1940. Pp. 48.)

Trade, Commerce, and Commercial Crises

NEW BOOKS

BÜCHNER, R. *Einzelhandel und Mittelstandspolitik.* (Zürich: Schulthess. 1940. Pp. 91. Fr. 2.85.)

INMAN, S. G. *Planning Pan-American trade.* (New York: League of Nations Assoc. 1940. Pp. 12. 15c.)

JONES, F. C. *Shanghai and Tientsin, with special reference to foreign interests.* Stud. of the Pacific no. 5. (New York: Am. Council, Inst. of Pacific Relations. 1940. Pp. xxxii, 180. $2.)

"Describes the history of the chief foreign concessions in China; their legal status; their economic importance; the losses which they have suffered from the Sino-Japanese conflict, and the problems they now face."

LARKIN, J. D. *Trade agreements: a study in democratic methods.* (New York: Columbia Univ. Press. 1940. Pp. xii, 135. $1.)

This is the first of a series of small volumes entitled International Economic Handbooks, edited by Eugene Staley for the Division of Economics and History of the Carnegie Endowment for International Peace. It deals with the American trade agreements act and program. Unlike the books by Sayre, Tasca and Culbertson, this one is concerned solely with the tariff-making process. Part 1 deals with the constitutionality of the act; part 2, with the organization and procedure under it; and part 3, with the previous congressional method of setting tariff rates and with the cost-equalization formula in theory and practice.

The author presents a strong defense of the program against charges of unconstitutionality and of undemocratic "star chamber" procedure, and brings out its superiority over previous methods not only in general terms but by means of concrete incidents drawn from the past and of detailed information as to personnel and procedure under the present law.

The author is specially qualified for such a task by reason of his training, his practical knowledge of the making of the Hawley-Smoot bill, and his later monographic study of *The President's Control of the Tariff* under the flexible clauses of the Act of 1922 and 1930. His style is clear, direct, and inviting, and the volume is well organized and documented.

The book was prepared and published during the controversy over the second three-year extension of the trade agreements act, but it has a continuing interest and value because of this program in the present political campaign and, still more, because of its possibilities as a contribution to the ultimate adjustment of international relations.

PAUL S. PEIRCE

PFANNER, J. A., JR. *A statistical study of the drawing power of cities for retail trade.* (Chicago: Univ. of Chicago Press. 1940. Pp. xii, 81. $1.)

WAKEFIELD, R. P. *Foreign import duties and regulations on fresh fruits and vegetables.* Trade promotion ser. no. 206. (Washington: Supt. Docs. 1940. Pp. iv, 130. 15c.)

———. *The shipment of samples and advertising matter abroad.* Revising supplement to trade promotion ser. no. 72 (1932 ed.). (Washington: Supt. Docs. 1940. Pp. iii, 100. 10c.)

Fifth census of production and the Import Duties act inquiry, 1935: final report. Part iii. *The food, drink and tobacco trades; the chemical and allied trades; miscellaneous trades.* (London: H. M. Stationery Office. New York: British Lib. of Information. 1940. Pp. xviii, 631. $2.50.)

Reciprocal trade agreements: hearings, 76th Cong., 3rd Sess., on H. J. Res. 407, to extend the authority of the President under sec. 350 of the Tariff act of 1930, as amended, February 26, 27, 28, and 29, and March 1, 2, 4, 5, and 6, 1940. Rev. print. (Washington: Supt. Docs. 1940. Pp. 867. $1.)

Accounting, Business Methods, Investments and the Exchanges

The Economics of Corporate Enterprise. By NORMAN S. BUCHANAN. (New York: Holt. 1940. Pp. xvii, 483. $3.25.)

Professor Buchanan (University of California) is to be congratulated upon having made in this book a substantial contribution to the literature of an important segment of the field of economic study. This seems to the reviewer to be true in spite of the fact that the author says (preface, p. vi.): ". . . there is no claim to having developed new doctrines; rather the aim has been to tie together the work of earlier writers into a useful pattern and to employ the tools they have fashioned in the treatment of important problems."

There is much corporation finance in the book, but there is much more. We have here a treatise on those phases of the economics of capitalism that are of special concern when viewed from the standpoint of the individual unit of enterprise which, it is assumed, is an incorporated unit. It ought to be observed, however, that much that is said is applicable to all enterprise units regardless of the legal forms (corporate, quasi-corporate or unincorporated) under which they are organized. Unless the reviewer has quite misunderstood the author's conception of his own work, this is a book on the economics of enterprise with the treatment so organized as to recognize the fact that enterprise today is in large measure conducted under the corporate form. The author says: ". . . with respect to the chosen title . . . the emphasis falls upon the word economics" (p. v.). Thus in chapter 2 Professor Buchanan ably discusses such fundamental topics as the price system in a capitalistic economy, the individual enterprise and the price system, and various concepts of capital as applied to the business enterprise.

In chapter 6 he deals with the economic theory of promotion, doing so in terms of equilibrium analysis, production costs and probable yield on investment in relation to profit-seeking operations conducted on various scales of magnitude, and the relations between aggregate investment and the amount of working capital. In chapter 7 on the maximization of profits, in chapter 9 on dividends, and in chapter 10 on the business-cycle problem the author makes considerable use of the modern marginal analysis. In fact throughout the work much attention is given to theory expressed in terms of average and marginal costs and average and marginal revenues. Careful theoretical analysis is even applied (in chapter 13) to the problem of deciding whether, in the face of failure, to reorganize or to liquidate and dissolve.

The author has by no means neglected the legal aspects of his subject. It is one of the particularly useful features of the book that it contains a compact, critical discussion (in chapter 14) of the reorganization of industrial corporations under the old equity receivership, under the late Section 77B and under the present Chapter X of the amended Bankruptcy act.

There are selected references for supplementary reading, a voluminous list of works cited, a glossary, an index of names, and an index of subjects. The organization of the materials is logical and orderly. The book is well written. The reviewer has used it with satisfactory results for one term, not as the sole text, but as a supplementary text, in an upper-class course in corporation finance. It is not the kind of a book that will appeal to those who are looking for technical instructions as to corporate procedure, or for elaborate descriptions of different types of corporation securities, or for suggestions of ways and means of evading the unfortunate effects of an after-acquired-property clause.

STANLEY E. HOWARD

Princeton University

Federal Regulatory Action and Control. By FREDERICK F. BLACHLY and MIRIAM E. OATMAN. (Washington: Brookings. 1940. Pp. xviii, 356. $3.00.)

The subject of this volume stands at the intersection of three main highways of social science: governmental intervention, public law, and public administration. Taking the first two highways largely as they find them, the authors have undertaken an engineer's survey of the third. To this task they have brought that mastery of detail and thoroughness of analysis for which they are justly noted.

Their significant contribution is to bring into sharp relief and contrast "three conflicting doctrines of public administration" that "are now struggling for domination of the federal government." These are: (1) the doctrine of executive management; (2) the doctrine of the judicial formula;

(3) the revisionist doctrine. They are succinctly summed up in the preface as holding, respectively: "(1) that the whole process of governmental administration should be under greater executive control; (2) that the process should be subjected to a more pervasive and strict judicial control; and (3) that after careful study of the whole situation, necessary changes should be made, whatever they may be."

The first doctrine is represented by the *Report of the President's Committee on Administrative Management,* notably for present purposes by that part which proposes reorganization of the independent regulatory commissions. The second doctrine is represented by the philosophy of the Special Committee on Administrative Law of the American Bar Association, of which the much-discussed Walter-Logan bill is largely an outgrowth. The third doctrine is represented by Dean Landis' recent volume on *The Administrative Process* and by the approach of the Attorney General's Committee on Administrative Procedure. It is embraced by Blachly and Oatman, who have in this volume and in earlier work made important contributions to its empirical groundwork.

On page 231 the authors say: "The revisionist doctrine is based on no assumption. It employs the inductive method, seeking only to know the facts and to base any suggestions for change upon facts rather than predilections." This states the fallacy of "raw" empiricism. It is impossible to think without assumptions; and it is obvious that the authors assume the validity of the inductive method. Nor is this all they assume. On page 266 they say: "The administrative system has developed step by step to meet everyday needs. . . . Changes which are made should not be intended to destroy the administrative system, but merely to improve it." Is this not to assume the desirability of evolutionary development of what we now have in preference to meat-axe "reform" based upon *a priori* premises that take no account of the "felt difficulty" to which the present system has been the response?

This is said not so much to challenge *what* the authors assume as to object to their denial of assumptions, and to insist upon the clarifying effect of making one's own assumptions explicit. The reviewer is inclined to agree with the authors' assumption of evolutionary improvement *versus* meat-axe "reform." At the same time he ventures to suggest that what they *look for* in the present system has been determined largely by this assumption.

The net result is a picture of great and apparently justifiable variety that makes the first two doctrines seem rash. Especially important in this connection is the distinction made between a "decision" and an "order." Having thus laid the groundwork in part 1, the authors proceed in part 2 to give blueprints of this rashness in the first two doctrines. After reading their criticism of the Walter-Logan bill the reviewer feels that nobody

could defend it except on premises that any informed person should be ashamed to advance.

While the reviewer is at the present writing inclined to agree that the federal regulatory commissions should not be torn apart, he finds Landis' defense of these agencies more compelling than that of the volume under review. He also objects to the assumption—in this case made explicit—of something that is at least debatable: that since rule-making is "legislative" in character, it is no proper concern of the President.

JAMES HART

University of Virginia

NEW BOOKS

BAKER, H. A. *Principles of retail merchandising.* (New York: McGraw-Hill. 1939. Pp. xiv, 462. $4.)

This textbook in retailing is designed for an advanced course following a general course in the field. It omits all detailed consideration of store location, layout, accounting, credit, personnel, finance, or general management in retailing and concentrates upon merchandising—the important function of buying and selling goods. Among the topics considered are merchandising organization, buying practices, receiving and marking merchandise, prices, personal selling, publicity, sales promotion, merchandising control and budgets, with special emphasis on the operation and management of large department stores. Numerous forms and illustrations are used to clarify specific points in merchandising procedure. Parts of the book follow the concise style of a merchandising manual for a specific store and do not give alternative practices which are also satisfactorily used by large department stores. The detailed treatment of procedure has necessarily limited the consideration of the theoretical and critical aspects of the subject.

The book is well written and should be satisfactory either as a text or a reference book on merchandising. At the end of each chapter are found lists of questions, references to published cases and problems, and a bibliography. For many instructors the teaching qualities of the book would be improved if more attention were given to the principles involved in the use of the techniques and procedures which are considered in detail.

E. H. GAULT

BURNHAM, E. A. *Expenses and profits of limited price variety chains in 1939.* Bull. no. 112. (Boston: Harvard Univ. Bur. of Bus. Res. 1940. Pp. vi, 29. $1.)

DANIELS, M. B. *Financial statements.* Monog. no. 2. (Chicago: Am. Accounting Assoc. 1939. Pp. 225. $1.)

DOLLEY, J. C. *Principles of investment.* (New York: Harper. 1940. Pp. xii, 460. $3.50.)

Emphasis is placed by Dolley upon description of the investment mechanism, and little space is devoted to the technique of security analysis. This will meet with the approval of instructors who seek a text suitable for the great majority of students who do not intend to become specialized analysts. Of the descriptive material, nearly one-fourth is devoted to the stock exchanges and the methods of margin trading. Frequent mention is made of the need to deal

only with "reliable" security brokers and dealers, but no real criteria are presented to aid in reaching this qualitative judgment. No mention whatever is made of the rapidly growing body of investment counsel firms. Investment trusts are dismissed with only a few words of comment. Nor are the various advisory and manual services, and the investment press, given appraisal. The author's presentation of comparisons between common stocks and bonds, as early as the second chapter, may be confusing to students not well grounded in corporation finance. Refreshing and valuable is the treatment of the investment return from bonds and preferred stocks (chapters 5 and 6); the usual dull and confusing mathematical analysis is eliminated and careful attention given to the chances of appreciation in the purchase of bonds and preferred stocks. The analysis of the supply and demand for investment funds is excellent (chapter 4). Problems in the appendix can scarcely be answered by students without class discussion beyond the scope of the book itself.

SHAW LIVERMORE

EVANS, G. H., JR., with BARNETT, G. E. *Principles of investment.* (Boston: Houghton Mifflin. 1940. Pp. vii, 225.)

FIELD, K. *Introduction to investment analysis.* (New York: Ronald. 1940. Pp. xii, 340. $3.50.)

This book is designed to serve primarily as a text on investments for college use. The subject, however, has been covered with sufficient clarity to meet the needs of others seeking a comprehensive, but not too detailed treatment of the science (or art) of investment.

The author in his treatment of the subject has emphasized throughout methods of analysis to be applied to different types of securities, having devoted a chapter each to public utilities, railroads, industrials, real estates, insurance companies, banks, investment trusts, and governments. Treatment of the legal *versus* the economic basis for values while not exhaustive is adequate as an introductory discussion.

Short chapters are devoted to the construction of investment programs, the mechanics of purchase and sale, return on investments, and the mechanics of investments. The matter of security price movements, discussed in the chapter dealing with the purchase of securities, might well have been given more complete treatment, possibly by according it a separate chapter.

A list of references follows each chapter and where the author has limited his discussion of certain topics in the text, he has furnished adequate material for further study in his reference list. Tabular and chart material, as well as copious examples, add to the value of this book as a text. Each chapter is followed by several problems, designed to focus the students' attention on the more important matters covered in the chapter.

R. E. BADGER

FORKOSCH, M. D. *The economics of American patent law.* Contemp. law pamph. ser. 4, no. 2. (New York: New York Univ. Law Quart. Rev. 1940. Pp. 72. $1.)

GARDNER, F. V. *Variable budget control, through management by exception and dynamic costs.* (New York: McGraw-Hill. 1940. Pp. 378. $4.)

GORDON, S. *Gordon's employment and agency agreements.* (New York: Prentice-Hall. 1940. Pp. 574. $6.)

GREIDINGER, B. B. *Accounting requirements of the Securities and Exchange Com-*

mission for the preparation of financial statements. (New York: Ronald. 1939. Pp. xviii, 517. $5.)

The Securities and Exchange Commission has become a powerful force for the improvement of accounting reports prepared for investors. Accounting policy and precedent are being established through its decisions on registration statements filed with it. The author of this book approaches his topic primarily through a study of a selected number of deficient and amended financial reports and accountants' certificates on file with the Commission. He believes that this "should permit the investigator to come to a reasonably clear understanding of the Commission's accounting requirements for the preparation of the prescribed financial reports as well as an acquaintanceship with that body's views on what are and are not 'recognized and accepted accounting principles.'" Various sections take up the financial statements to be filed, the detailed problems of the balance sheet, of the profit and loss statement and of accountants' certificates.

W. P. FISKE

GUTHMANN, H. G. and DOUGALL, H. E. *Corporate financial policy.* (New York: Prentice-Hall. 1940. Pp. xxxii, 795. Trade, $5.35; school, $4.)

HAMM, J. E. *The English Hire-Purchase act, 1938: a measure to regulate instalment selling.* (New York: Russell Sage Found. 1940. Pp. 59. 50c.)

Description of the Act, with explanation of the agreements, their restrictions and termination.

HOVDE, H. T., editor. *Marketing in our American economy.* Annals, vol. 209. (Philadelphia: Am. Acad. of Pol. and Soc. Science. 1940. Pp. xii, 259. $2.)

HOVING, W. *Your career in business.* (New York: Duell, Sloan and Pearce. 1940. Pp. 211. $2.)

LEWIS, H. T. *Problems in industrial purchasing.* 2nd ed. (New York: McGraw-Hill. 1939. Pp. xvii, 649. $5.50.)

The present work is a revision of the book first published in 1935 and devised to provide case material for the Harvard course in industrial purchasing. The collection of cases is definitely limited to the problems of purchasing agents for manufacturing concerns. Purchasing by industrial distributors for resale is eliminated because this subject is covered in marketing texts and in case material and because the problems of the purchasing agent who buys supplies and raw materials are quite different from those who buy to sell.

The new edition contains 87 cases of which 40 are new. Twenty-four of the cases in the earlier edition have been omitted. Two new sections have been added—one on *purchasing versus manufacturing* and one on the *purchase of equipment.*

The purpose of this volume, the author insists, is not primarily to prepare students to become purchasing agents, but rather to impress on them the importance of the procurement function in business and to teach them to think realistically and clearly. No attempt is made to pose specific questions at the end of each case as has been true of some of the Harvard case books, but each case does present a situation that calls for a decision on the part of the management or of the purchasing agent himself. There is no doubt that a real attempt to think through and discuss these cases will equip a student better than will the reading of a text but the arduous nature of such an effort makes the book better suited for classroom use than for reading by an individual.

JOHN W. WINGATE

LIVERMORE, J. L. *How to trade in stocks: the Livermore formula for combining time element and price.* (New York: Duell, Sloan and Pearce. 1940. Pp. 140. $2.50.)

LOESER, J. C. *The over-the-counter securities market: what it does and how it operates.* (New York: Nat. Quotation Bur. 1940. Pp. 183. $2.)

MCNAIR, M. P. *Operating results of department and specialty stores in 1939.* Bull. no. 111. (Boston: Harvard Univ. Bur. of Bus. Res. 1940. Pp. vi, 34. $2.50.)

NOLEN, H. C. and MAYNARD, H. H. *Sales management.* (New York: Ronald. 1940. Pp. xiv, 505. $4.)

PATON, W. A. and LITTLETON, A. C. *An introduction to corporate accounting standards.* (Chicago: Am. Accounting Assoc. 1940. Pp. xii, 156. $1.)

This monograph is a new and real contribution to the discussion of accepted accounting principles. The approach is refreshingly different. It is through underlying concepts and discussions of cost, revenue, income, surplus and interpretation. There are some sections which will provoke active opposition by many practitioners; there are parts in which the reasoning is not as firmly based or as complete as could be desired: but the net effect is to direct attention to fundamentals. It is a stimulating piece of work.

W. P. FISKE

RUKEYSER, M. S. *Financial security in a changing world.* (New York: Greenberg. 1940. Pp. 272. $2.50.)

The nub of Mr. Rukeyser's advice to the investor is that he be prepared for almost any eventuality. Future developments affecting investment values cannot now be foretold with any degree of accuracy, and even historical precedents may prophesy falsely. For example, inflation may come or it may not come; it may be mild or it may be wild—depending upon the pulls of easy money, domestic recovery, and war orders opposing those of excess productive capacity, possible retrenchment in emergency government expenditures, monetary controls, and direct control of prices. War may be long or short—and the indirect effects through a rising national income and a more prosperous agriculture may be more important than the direct effect of purchase of war materials. If war buying directly or indirectly expands business, will profits expand or will they be destroyed by price control or adverse government tax policy? Will workers with their present sense of power stand idly by while profits rise? Which industries will benefit, which suffer? In the last war, common stocks of machinery, automobile, shipping, steel, paper, coal, and woolen companies experienced the greatest increases in market price, while those of railroad, traction, electricity, gas, telephone and telegraph, mining, and cigarette companies showed the smallest gains or largest losses during the war period. But in this war, states the author, conditions are different. The belligerents are partially or wholly self-sufficient or have large supplies of important materials on hand; the Johnson act prevents foreign buying financed by American credit. (This was written before the Allied defeats in Flanders and France.) Even the public utility and railroad industries might gain more by increased volume than they lose by rigid prices and rising costs.

What is the answer to the problem of management of personal finances in times like these? The author prescribes a balanced financial diet: life insurance (augmented), bonds, preferred stocks, and common stocks—with war

orphans as well as war babies included—but with emphasis upon normal earning power rather than on war and inflation profits. Calm, balanced perspective rather than "headline hysteria" must be the guide.

For the business-man, the author advises the humanizing of labor relations, steadier work, and mutual understanding by management and labor of each other's problems. He cautions against expansion of plant or inventories to meet ephemeral war orders. Exaggerated notions of expansion of trade with neutrals should not be entertained. The Hull reciprocal trade program is of questionable worth. We must and can build internal industry with less dependence on foreign trade. Above all, business must tell its story to the public, so that it will be understood and not mistrusted.

If one seeks in this book a specific choice of securities or a cut-and-dried program for "financial security" he will be disappointed. The easy and readable style is clearly that of a financial columnist who is addressing a large audience, intent on popularizing old principles rather than discovering new ones.

CHELCIE C. BOSLAND

SAMS, E. C. *The chain store's place in American life.* Statement before a Subcommittee of the Ways and Means Committee, U. S. House of Representatives, Washington, D.C., April 10, 1940. (Washington: Ways and Means Committee, U. S. House of Representatives. 1940. Pp. 23.)

SELVERSTONE, A. W. *Bankruptcy and reorganization.* (Brooklyn: Harmon Pubs. 1940. Pp. 601. $4.)

SHIELDS, H. G. and WILSON, W. H. *Consumer economic problems.* (Cincinnati: South-Western Pub. Co. 1940. Pp. 777. $1.88.)

SHILT, B. A. and WILSON, W. H. *Business principles and management.* (Cincinnati: South-Western Pub. Co. 1940. Pp. 642. $1.80.)

STONE, H. F. *Public control of business.* Edited by ALFRED LIEF. (New York: Howell, Soskin. 1940. Pp. 344. $3.50.)

TENENBAUM, J. *American investments and business interests in Germany.* (New York: Joint Boycott Council. Pp. 39.)

VAN POLEN, H. *Economic engineering: the master way.* (Boston: Christopher Pub. House. 1940. Pp. 55. $1.25.)

American Association of Collegiate Schools of Business: proceedings of the 21st annual meeting, College of Commerce, University of California, and the Graduate School of Business, Stanford University, April 20, 21 and 22, 1939. (Fayetteville, Ark.: Am. Assoc. of Collegiate Schools of Bus. 1939. Pp. 215. $1.25.)

These proceedings include, in addition to the annual reports of officers and committees, papers and discussions on educational and administrative problems of business schools and on the relation of business to government. In particular, labor relations and transportation were considered at two of the seven sessions.

W. P. FISKE

The distributor and his customers. Addresses, with discussion, at the 28th annual meeting, May 1, 1940. (Washington: Chamber of Commerce of U.S. 1940. Pp. 31.)

Investment trusts: hearings, 76th Cong., 3rd Sess., on S. 3580 to provide for the registration and regulation of investment companies and investment advisers, and for other purposes. Part 1. *April 2-10, 1940.* (Washington: Senate Banking and Currency Committee. 1940. Pp. 323. 50c.)

Investment trusts and investment companies: report of the Securities and Exchange Commission, pursuant to section 30 of the Public Utility Holding Company act of 1935, companies sponsoring installment investment plans. (Washington: Securities and Exchange Commission. 1940. Pp. 211. 25c.)

Papers on accounting principles and procedure presented at the fifty-first annual meeting of the American Institute of Accountants. (New York: Am. Inst. Pub. Co. 1940. Pp. 295. $1.)

Survey of American listed corporations: reported information on selected industry groups. Vol. ii. *Reports 10-18, inclusive.* Vol. iii. *Reports 19-27, inclusive.* A WPA study. (New York: Securities and Exchange Commission. 1940. Pp. 375; 280.)

Trends in company vacation policy. Stud. in personnel policy no. 21. (New York: Nat. Industrial Conf. Board. 1940. Pp. 19.)

Capital and Capitalistic Organization

NEW BOOKS

ARNOLD, R., and others. *The Sherman Antitrust act and its enforcement.* Law and contemp. prob., vol. 7, no. 1. (Durham: Law and Contemp. Problems. 1940. Pp. 160. 75c.)

BRYANT, J. M. and HERRMANN, R. R. *Elements of utility rate determination.* (New York: McGraw-Hill. 1940. Pp. 475. $4.50.)

HAUSSMANN, F. *Die wirtschaftliche Konzentration an ihrer Schicksalswende: Grundlagen und Aufgaben einer künftigen Trust- und Kartellgestaltung.* (Basel: Verlag f. Recht und Gesellschaft. 1940. Pp. xvi, 435. Fr. 25.)

PIETRANERA, G. *La dinamica dell' interesse nell' economia capitalistica.* (Padua: Milani. 1940. Pp. 179. L. 25.)

PIVATO, G. *Le imprese di servizi pubblici.* Pub. ser. ii, n. 10. (Milan: Univ. Commerciale L. Bocconi. 1939. Pp. xxvi, 788. L. 90.)

Among works dealing comprehensively with public utility operation and its more direct results, this book deserves a prominent place. It is based primarily on a study of Italian experience, although it ventures less into description or historical phases than foreign readers might find useful; secondarily (but not subordinately) on foreign experience, mainly American and English, somewhat German, much less French than might be expected. Since foreign experience is invoked merely for the light it may throw on general principles, the limitations of its treatment are the less serious. Public ownership and operation are generally excluded as not germane to the development of principles; on the contrary, what is said of private operation is deemed of value to public. Railroads are but distantly in view, likewise tramways and water companies. Emphasis is placed chiefly on problems of financial set-up, on the sales policies of utility companies, their accounting practices, the relation of costs to sales policies and in general to efficient administration. Here lies the book's chief claim upon its readers.

ROBERT F. FOERSTER

REYNOLDS, L. G. *The control of competition in Canada.* Harvard stud. in monopoly and competition, 2. (Cambridge: Harvard Univ. Press. 1940. Pp. xiv, 324. $3.50.)

This book is an endeavor to describe and classify the Canadian economy in terms of competition, monopoly, etc., to state the attitudes of the community

and to discuss the various legislative measures concerning monopoly and competition, which have been passed by the provinces and the Dominion. The line of approach is indicated by the general headings of the discussion which are, the private control of competition, the problems of inefficiency (*e.g.*, monopoly, combination, etc.), public policy and legislation. There is a great deal of interesting and valuable material in the book, concerning the extent to which Canadian industry is either competitive or monopolistic. Most of the material has been dug out of the reports of various Royal Commissions, committees, and governmental reports of the last twenty years. While a great deal of the basic data have been available for some time, the work of extracting, arranging and analyzing it is to be commended.

The description of Canadian trade and industry is of particular interest and reveals a situation which is at once simple and complex—simple because there are so few firms in many industries and complex because the problem of control thus baffles existing legislation. Although the definition of competition is hardly the classical one, the author purports to follow the usage of this school. Of course any definition may be quite valid, and usable for the particular purpose proposed, but its uniqueness should be recognized and not confused with a more general and widely accepted usage.

So far as legislation is concerned, considerable attention is given to the Combines act, which is Canada's main if not only anti-trust law. The various endeavors to limit and control competition by legislation are also described. These are, mainly, the Companies act, tariff acts, patent acts, Industrial Standards act, Price Maintenance and Agricultural Marketing acts. After a discussion of these various aspects there are suggestions as to means of making public policy and control of competition more effective. The book has a bibliography and index which, however, could be improved.

C. A. CURTIS

A decade of utility regulation in New York State, 1930-1940. (Albany: Public Service Comm. of N.Y. 1940. Pp. 340.)

The Commission, in this detailed report of its stewardship for the decade, claims to have achieved a large measure of success, particularly in the control of electric utilities, by rigorous application of powers recently conferred upon it by the legislature, especially the power to issue temporary rate orders and to assess costs of investigation against companies. It is said to have: reduced rates, simplified rate schedules, strengthened financial structures, restrained holding company abuses, enforced strict service standards, prescribed adequate accounting systems, revised plant accounts to reflect original cost minus accrued depreciation, and established continuing property records on a cost basis. Significant, though less extensive, progress is claimed in respect to rural electrification, regulation of water, gas, telephone, motor carrier and municipal utilities, and the elimination of grade crossings. Valuable historical and statistical materials are to be found both in the text and in the appendices.

The critic will recognize the achievements of the Commission but will note an excessive spirit of self-justification. While it is not to be expected that the Commission when testifying in its own behalf will evidence perfect impartiality, its failure to consider all relevant factors renders the report defective for the critical evaluation of state regulation. It takes credit for results that are only partially attributable to its own efforts; it magnifies its success but re-

mains discreetly silent with respect to its failures; it portrays itself as the defender of the public interest but fails to indicate the economic and legal limits beyond which it is powerless to protect the public interest. Those familiar with more objective studies will understand that this report, standing alone, gives an entirely erroneous impression of the efficacy and ultimate potentialities of state utility regulation.

Nevertheless, one must admire the courage, intelligence and devotion of the New York Commission. Operating, as it does, within an institutional framework that, in the judgment of many competent students, is hopelessly inadequate for the task in hand, and harassed continuously by the formidable opposition of private utility interests, it has by tenacious perseverance achieved significant, if limited, results. Let him who has never faced the barrage of the organized utility interests cast the first stone! After ten years of such experience the Commission is reasonably entitled to indulge in some glorification of its own handiwork.

HORACE M. GRAY

Economic power: hearings, 76th Cong., 1st Sess., pursuant to Public Resolution 113 (75th Cong.) authorizing and directing a select committee to make a full and complete study and investigation with respect to the concentration of economic power in, and financial control over, production and distribution of goods and services. Part 9. *Savings and investment, May 16-26, 1939.* Part 10. *Life insurance, inter-company agreements terminations, savings bank insurance, legislative activities, June 6-21, 1939.* (Washington: Temporary Nat. Econ. Committee. 1940. Pp. 3493-4151; 4152-4932. 75c., each.)

Statistics of electric utilities in the United States, 1938. (Washington: Federal Power Comm. 1940. Pp. 500. $2.)

Information on 393 individual electric utilities.

Labor and Labor Organizations

Labor Relations in the Automobile Industry. By WILLIAM HESTON McPHERSON. (Washington: Brookings Inst. 1940. Pp. xi, 173. $1.50.)

Professor McPherson deals with labor relations in all three branches of the motor industry (vehicles, bodies, parts), concentrating on the recent era of powerful labor unionism, of which the sit-downs of 1937 were early symptoms. His treatment is impartial and competent, giving numerous up-to-date statistics, an illustrative current union agreement, and his impressions of many trends which cannot be objectively measured. Since this book went to press, most of the General Motors plant elections have been held, establishing further the primacy of the UAW-CIO, which appears now to enroll over half the nearly 500,000 wage earners of the industry. Its strength, however, is rather concentrated in the centers within a radius of a couple of hundred miles of Detroit, in which it has exclusive bargaining rights in most plants aside from Ford's; and its leaders are still assisted in important negotiations by Messrs. Murray and Hillman.

Since the Fansteel decision the automobile unions have not attempted

much (if any) use of sit-down tactics, but they have resorted in many instances to "quickie" strikes and slow-downs. The recency of the latter types of dispute testify to the bitterness still felt on both sides; moreover rather extreme demands for high annual wages, for joint control of production standards, and for shortening hours to combat unemployment still emanate from the union. Yet McPherson shows that most of the ends for which the union is seriously striving at present are fairly well within reason. The General Motors income stabilization plans, for example, would likely have been regarded much more favorably by union leaders if the latter men had been consulted in the formulation of such plans; union policies on seniority and work sharing are moderately well adapted to the seasonality of the industry; and on work assignments the essential demand is for opportunity of the union to check, rather than to help initiate, the rates of output. These matters, and many other occasions for conflict (such as the striving for "union shop" and the great problems of collecting union dues and achieving suitable status for shop stewards), are being worked out amicably in many plants. Employers and unions are becoming less militant, more constructive.

Referring to wages, McPherson points out, on the one hand, that the union has been very successful in pushing up rates in its strongholds (*e.g.*, "wage rates in Chicago parts plants [much less strongly organized] are typically about 20 per cent lower than those in Detroit"); and, on the other hand, that this increasing differential between the more and less highly organized sectors endangers the former's annual earnings by creating new incentives for employers to get work done in the low-wage locations. The union, of course, is pushing organization everywhere; moreover it is also pressing demands for use of the union label on parts, so that unorganized shops can be boycotted. Improved technology and management methods are accepted with good grace by these organized workers, though present union policies favoring day work, increasing checks on discipline and dismissal, and other protections against "speedup," hold some threat of "speeding-down" to the point of curbing the industry's wage-paying capacity.

More attention might be given to the question whether the union is actually attempting standardization of wage rates for each level of skill and effort in each market, or is likely indefinitely to temper this principle by another one—charging what the traffic will bear, according to the prosperity of the employer. And our author's numerous comparisons of "before and after" the rise of the union's power contain some rather misleading characterizations of the earlier state of affairs, such as pre-union trends in wage methods and earnings, in employment stabilization, and in hiring and firing. The quality of the personnel research and staff work of the companies and of the trade associations involved is not quite adequately recognized; some charges against employers supported by little or no evi-

dence are repeated. The book, however, properly corrects the popular misconception that the preponderance of relatively young workers in the motor industry is due in a significant degree to discrimination against hiring older men or to their inability to stand the pace (rapidly growing industries usually are staffed predominantly by younger men); and it furthermore poses the problem presented by the aging of the present working force under the protection of seniority rights.

Z. C. DICKINSON

University of Michigan

Labor Problems in America. Edited by EMANUEL STEIN and JEROME DAVIS. (New York: Farrar and Rinehart. 1940. Pp. xvi, 909. $3.50.)

Recent economic changes have resulted in considerable reconstruction of our national point of view and policy concerning industry. The more humanitarian and reformist social policy which we have adopted has caused a shift in the relative importance of the problems of labor relations. This fact is recognized by the authors, who examine all of the problems from the standpoint of the workers, the employers, and the government. The impact of new industrial facts and experiences upon the position of these respective parties to industry and the new methods adopted to meet the changed conditions are set forth in considerable detail.

In Book I, the workers' problems are viewed as they exist within the framework of capitalistic economy. Unemployment, accidents, disease, old age, wages, hours of work, women in industry, child labor, and industrial disputes are analyzed. The origin and development of the American labor movement, up to 1933, are presented in Book II. Against this historical background the authors examine the structural and functional aspects of American unionism. This is the subject-matter of Book III, which also contains a discussion of the conflict between the A.F. of L. and the C.I.O. Both the economic and the political activities of unionism are treated in the light of the growth of mass production and the concentration of corporate control. The authors subscribe to the judgment, generally held by labor economists, that the American Federation of Labor was not capable of meeting the challenge of significant changes in our economic order, and that a more dynamic, militant type of organization and leadership was imperative. This was evident in the rise to power of the C.I.O.

The employers' approach to the problems of labor relations is described in Book IV. Convinced that employers' methods of solving these problems are too often neglected, the present volume gives considerable space to general personnel procedures and the anti-union activities of American corporations. Methods of selection and placement, benefit schemes, and financial incentives are examined with care, as are the employment of labor espionage and the use of strikebreakers.

Book V includes an analysis of the state's relation to labor. Here are

discussed such matters as the development of labor legislation, recent changes in that legislation, the legal aspects of union activities, the point of view and attitude of the courts, and methods of settling industrial disputes.

Although the book supposedly deals only with American problems, the authors deemed it necessary for comparative purposes to review (in Book VI) the labor movement in certain foreign countries, notably Great Britain, France, the Soviet Union, and pre-Nazi Germany. The international working-class movements also are given attention here.

The point of view of the authors is clearly that of the institutional school. The authors believe that the constituent elements of the labor problem, overtly manifested in strikes and lockouts, center upon a conflict of economic interests which are conditioned largely by the institutional framework of the present social system. In the final analysis, the industrial conflict is seen as a result of maldistribution of the product of industry. Although this conflict is characterized as "irrepressible," this is merely a rhetorical flourish, since throughout the book there is evident an optimistic belief in the possibility of immediate improvement of industrial conditions and relations. The tone of the discussion is definitely liberal, with occasional expression of confidence in social reconstruction as the ultimate way out of the difficulties.

Appended to each chapter is a list of supplementary readings and questions for class discussion.

The authors nowhere claim originality in point of view, organization, or method of presentation. The organization might have been improved if the subject-matter of Book II, "The American labor movement," and of Book VI, "Foreign labor movements," had been included in Book III, "The workers' approach to the labor problem." This would have simplified the arrangement and made it somewhat more logical. Moreover, a conception of the industrial conflict that confines it within the narrow limits of dissatisfaction over the division of the product of industry (p. 5) can scarcely be accepted as complete. Participation in the control of conditions affecting human relations in industry is a major phase of the labor problem, and the aims of such participation transcend the limits of financial return to labor. Both as an immediate and as an ultimate objective, the workers seek partial or complete control of industrial relations not merely as a means of obtaining a larger share of the product but also that they may secure and protect all standards of employment.

GORDON S. WATKINS

University of California

The National Labor Policy and How It Works. By JOSEPH ROSENFARB. (New York: Harper. 1940. Pp. xxxii, 732. $5.00.)

Written by an attorney of the National Labor Relations Board, with a preface by Senator Wagner and a foreword by the Board's chairman, this book is virtually an official commentary on the Wagner act and its administration. Mr. Rosenfarb analyzes at length the background of the Act, its substantive and procedural terms, and the multitude of administrative and judicial problems raised in its application. He also discusses issues involved in many proposed amendments. His exposition of principles emerging from hundreds of cases make the book a valuable reference for students of labor law. True, Mr. Rosenfarb's choice of language in many passages is not likely to please opponents of the statute. It is no doubt hard to avoid this in discussing a measure that has given rise to much heated controversy. At any rate, the author's sincerity, his knowledge and the cogency of his arguments are impressive.

The objective of the Act is to encourage the practice of collective bargaining, and thereby to contribute to labor peace. For this purpose, the Board is empowered to prevent certain practices of employers which interfere with the rights of employees to self-organization, and it is also authorized to designate exclusive representatives of workers to bargain with employers. In its procedure, the Board is essentially like other federal quasi-judicial agencies, notably the Federal Trade Commission. The Act appears to be soundly and fairly constructed. But its administration is difficult, fundamentally because it cuts across employer *mores* long established in this country. From the standpoint of minimizing frictions, it may be that in certain directions the Board has attempted too sudden a departure from the traditional labor law, so heavily weighted against collective bargaining. Furthermore, the AFL-CIO controversy has thrown additional burdens on the Board. Under this cross-fire, the Board has had to cope with stubborn problems in deciding the legality of trade agreements and in determining appropriate bargaining units. As Mr. Rosenfarb says, "The rôle of umpire is not one calculated to win friends."

Seldom has an administrative agency had to undergo so much misrepresentation in the public press as has the Labor Board. The attacks on the Board are diverse, criticism ranging from substantive provisions to procedure and administrative set-up, but the apparent ultimate purpose of most of them is to emasculate or repeal the act. The Board is stigmatized as unfair to employers, as pro-CIO, and as a fomenter of industrial strife. To be sure, through the clouds of gossip one can detect some substance in criticisms of the Board's internal structure. Its work has perhaps suffered from excessive centralization of functions, from insufficient and relatively untrained personnel that has few precedents to guide it, from too much stress on legal niceties. Of course it remains that persons subject to the law

are well protected against its abuse. And such difficulties are to be expected in the early administration of a statute that tackles complicated problems. Unfortunately, Mr. Rosenfarb has little to say about these constructive criticisms.

But even to the intelligent casual reader of the newspapers it must be plain that the Labor Board's work has been presented in a one-sided and uninformed manner. Examination of the record does not bear out most of the charges of deliberate bias and willful trouble-making. By September 1, 1939, the Board had closed almost 20,000 cases. Of these cases, 94 per cent were closed without formal hearing, 42 per cent being resolved in favor of the employer by withdrawal or dismissal of the charge, and 52 per cent being settled in terms agreeable to both parties. Only 6 per cent went to formal hearing, and these are the cases that figure prominently in the debates. Moreover, the Board has settled nearly 2,000 strike cases. There has been a greater decline in the number of strikes in industries subject to the Act than in other industries. More labor disputes are being settled without strikes than formerly. And the Board's record in the courts is an enviable one. These facts are all too little known.

CARL T. SCHMIDT

Columbia University

Labour and Democracy in the United States. By KENNETH WHITE. (Liverpool: Univ. Press of Liverpool. 1939. Pp. xi, 381. 12s. 6d.)

This book will be found to be one of the most readable and interesting of the many current volumes dealing with the changing scenes in labor relations. The fact that it was written by an Englishman, with the point of view which it would be natural to expect of such a background, has enhanced rather than detracted from its value. As is explained in the preface, most of the material was gathered during a two-year sojourn in the United States as a Commonwealth Fund Fellow.

The study starts with the background of the American labor movement, positing the point of view that a frontier environment and a pioneering spirit supply the keys to many of the problems with which we are faced at the present time. The influence of this attitude of "rugged individualism" is still found in the hesitancy with which labor organizations espouse any governmental action on their behalf. It would appear that conflict is indigenous to the American scene.

The book then reviews the peculiarities of the American political set-up, contrasting the American political party with the national party in Great Britain. ". . . There is no national policy throughout the American party: its unity is mainly one of name, its membership is determined largely by out-of-date historical sentiment. Fundamentally, it is a machine for securing votes for individual candidates whose aims and ideals may or may not

agree among themselves" (p. 46). The effect of this rather loose and irrational set-up has been of course to obscure policies and exaggerate the importance of individual names. The result, the author concludes, has been detrimental to the cause of unionism. The remainder, and largest part of the book, is devoted to a consideration of union problems, policies and practices during the Roosevelt administration, the specific sections being labeled "The New Deal," "The American Federation of Labor" and "Roosevelt's second administration." It is an excellent survey and summary of labor struggles in "the thirties" and may be considered a valuable and noteworthy addition to the literature on the subject. The section devoted to the A.F. of L. in particular presents an unusually clear picture of its structure and of its relationship to the development of the C.I.O.

In its general point of view the study can be considered just a little left of center, showing the influence of the liberal tendencies of Douglas and Perlman. Criticism of political, business and A.F. of L. policies is quite frank and unabashed. In that respect it is to be regretted that the author permits himself to be drawn into the making of statements which are provocative and unsupported. Examples of this are found in the following: "This official survey (*i.e.*, of unemployment) is not to be trusted because many employers discharged their work force, or reduced it, on the day of the census, in order to make the depression look worse, and thus make Roosevelt the more unpopular" (Note, p. 42). "The transition from frontier violence to organized repression, especially since the proportion of the American population used to living by illegal and violent means far outweighs the proportions of pre-fascist Italy and Germany, would seem perilously easy" (p. 303). "Unemployment is a problem that can only be solved by political action, and must therefore await the birth in the U.S.A. of strong labor action at the polls" (p. 304).

The author concludes his work by stating that, "If any lesson is to be drawn from the foregoing pages, it is that a successful labor movement depends on winning over, or at least neutralizing, the wielders of political power." To this statement one might take exception. Certainly the concept of industrial democracy is not as one-sided as the author would have us believe. It is more than a political mechanism. It is as vital an element within the ranks of the workers themselves as it is in the realm of party politics. That the author is aware of this is evident in his frequent references to certain practices of which the building trades unions are particularly guilty (*q.v.* pages 188-190). But in no instance does he lead the reader to believe that they represent anything more than vestigial remains of a frontier psychology, which situation leads one to express the wish for an extremely thorough and comprehensive study of the practice of democracy within the labor movement itself.

While a certain bias is evident as one progresses through the work, the study is characterized by a reasonably objective approach, even though the use of the *C.I.O. News* as a documentary source may be questioned. The workmanship is commendable and the style is pleasing.

ROBERT SCHULTZ

Drew University

NEW BOOKS

BALDERSTON, C. C. *Wage setting based on job analysis and evaluation.* Ind. rel. monog. no. 4. (New York: Industrial Rel. Counselors. 1940. Pp. 59. $1.)

"The present study seeks to review the different methods of job analysis and to appraise the various techniques in terms of good industrial relations policy. Its primary purpose is to serve as a practical aid to industrial relations executives, union officials, and others immediately concerned with wage setting by means of job analysis and evaluation."

BOW, F. T. *Independent labor organizations and the National Labor Relations act.* (New York: Prentice-Hall. 1940. Pp. xiii, 120. $2.)

"This book is addressed to those employees who, for one reason or another satisfactory to themselves, do not wish to be members of any national labor organization, but who do desire to organize their own independent organization for the purpose of bargaining collectively with their employers and to have the protection of the National Labor Relations act in so doing. That is a right to which they are unquestionably entitled and their problem is the simple one of how they can best avail themselves of that right."

BROOKS, R. R. R. *As steel goes, . . .: unionism in a basic industry.* (New Haven: Yale Univ. Press. 1940. Pp. 275. $3.)

COOKE, M. L. and MURRAY, P. *Organized labor and production: next steps in industrial democracy.* (New York: Harper. 1940. Pp. x, 277. $2.50.)

Philip Murray, one of the outstanding leaders of the C.I.O. and Morris L. Cooke, well known consulting engineer, have joined together to discuss the rôle of organized labor in production. The fundamental premise from which both authors proceed is that wholehearted acceptance of collective bargaining is a prerequisite for improvement in production and the continuance of capitalistic democracy. Mere recognition of organized labor by employers under compulsion is not sufficient to deal with problems which limit productivity of individual workers, of the industrial plant, and of our entire industrial system.

The volume begins with a brief background statement on the evolution of American industry and the rôle played by the Industrial Revolution in this development. The authors then proceed with a discussion of the present rôle of organized labor and management and of controversial practices of both management and organized labor. The discussion on the labor side touches such issues as the strike, including sit down and sympathetic strikes, the boycott, restriction of output, and seniority. On the management side, efforts to deal with waste, the speedup and stretchout, and withholding of financial information are given critical analysis.

A convincing showing is made that management has a great deal to gain by enlisting the participation of organized labor in the settlement of problems of common concern such as methods of wage determination, hours of work, and safety and health. The authors point out, however, that the rôle of organized labor should not be restricted to developing increased efficiency within a par-

ticular industrial unit and that in order to achieve the total national production which modern technology makes possible there must be a collaboration of labor, management and government.

To those who question whether the leadership of organized labor can play the part portrayed for it by the authors of this volume, it is pointed out that only after there is a full and wholehearted recognition of the advantages of collective bargaining and the strengthening of contractual relations with unions will there be a development of the type of leadership that is ready and able to coöperate with management in the furtherance of a common enterprise.

CARROLL R. DAUGHERTY

DEARLE, N. B. *The labour cost of the World War to Great Britain, 1914-1922: a statistical analysis.* (New Haven: Yale Univ. Press, for the Carnegie Endowment for Internat. Peace. 1940. Pp. ix, 260. $2.)

GALENSON, W. *Rival unionism in the United States.* (Washington: Am. Council on Public Affairs. 1940. Pp. 317. $3.25.)

GILL, C. *Unemployment and technological change.* Rep. no. G-7. (Philadelphia: WPA, Nat. Research Project. 1940. Pp. 21.)

JOHNSEN, J. E., compiler. *Trade unions and the anti-trust laws.* Ref. shelf, vol. 13, no. 10. (New York: Wilson. 1940. Pp. 308. $1.25.)

LESTER, R. A. *Economics of labor.* (Seattle: Univ. of Washington Book Store. 1940. Pp. 424. $3.50.)

MARIANO, J. H. *The Wagner act.* (New York: Hastings House. 1940. Pp. 229. $2.50.)

Only approximately one-third of the contents of this little book deals with the Wagner act. Three other essays, dealing with labor injunctions, labor's attitude toward the judiciary and labor as a political party, cover two-thirds of the volume; and the discussion of these matters has only the loosest relationship to the subject of the Wagner act.

The book is uneven in content and labors under the handicap of a clumsy and turgid presentation. There is much moralizing throughout the volume in the manner of conventional editorials, directed either to converting more employers to the beneficial purposes of the Wagner act or to labor leaders against being too importunate in their demands or expectations. The discussion of labor injunctions, perhaps the most valuable in the volume, is marred by long stretches of advice and this only obscures some of the valuable elements of the exposition.

The volume is intended as a popular exposition, but its tone and content are pedantic rather than exploratory. Except perhaps for the discussion of labor injunctions, there is little analysis or theoretical exposition for the informed. Subjects are touched upon only to be released with a pinch and a good word. For instance, less than two pages are devoted to what appeared to be intended as an exposition of the economic limits of collective bargaining, and this says nothing for the trained economist.

The treatment of the title essay constitutes a brief exposition of the main purposes of the National Labor Relations act and some of the problems which have developed under its administration. Emphasis is placed on the preamble as a great piece of social legislation and on the benefits obtained by unions under its operation.

The author argues that the split in the labor movement has created the greatest difficulty for the Board and warns about the important power pos-

sessed by the Board under the Act to determine the form of the labor movement. Under the Act the courts have no authority to review certification orders issued by the Board determining the appropriate bargaining agency. The Board's authority in certification cases before it is broad, exclusive and final. Such power must, therefore, be exercised with reserve and judgment.

GUSTAV PECK

OBER, H. *Trade-union policy and technological change*. Rep. no. L-8. (Philadelphia: WPA, Nat. Research Project. 1940. Pp. ix, 129.)

The purpose of this study is to describe in a systematic fashion the attempts of organized labor to protect its members from the short-run effects of technological change. The various measures which have been taken to lighten the impact of technology upon the workers may be placed in the following categories: minimization of displacement, maintenance of earnings, reduction of hours, job tenure, and coöperation with management.

The materials for the study, drawn from secondary sources, are skillfully integrated. The brochure is a concise introduction to the work done in the field.

GEORGE T. BROWN

PHELPS, O. W. *The legislative background of the Fair Labor Standards act*. (Chicago: Univ. of Chicago School of Business. 1939. Pp. ix, 71. $1.)

The author has compared the provisions of the Fair Labor Standards act with earlier labor and welfare legislation, and he has shown by adequate reference that the new legislation represents no novel departure. He has traced these developments on both the state and national fronts, and proven that legislative regulation of wages, hours and child labor has steadily increased, with only rare and occasional setbacks.

The material is well organized and it might have been improved if the effect of labor legislation upon employment had been given some consideration.

PHILIP TAFT

RAM, V. S. *The state in relation to labour in India*. Sir Kikabhai Premchand readership lectures delivered in January, 1938. (Delhi: Univ. of Delhi. 1939. Pp. viii, 175.)

SELLS, D. *British wages boards: a study in industrial democracy*. (Washington: Brookings Inst. 1939. Pp. xv, 389. $3.)

The theme of this book is contained in its subtitle. Miss Sells is extremely enthusiastic about the British method of setting minimum wage rates. In fact she suggests that the give-and-take method of arriving at the final rates, with employers, employees and representatives of the public all participating, may be more important than the particular rates arrived at. Her book is thus primarily a study, and a very competent study, in methodology. A number of interesting factual conclusions, however, arise from her work.

Since her earlier book, *The British Trade Board System* (1923), there has been remarkably little extension of the boards into new trades, while the total number of workers coming under them has actually decreased. (Slightly over a million are now in covered trades.) Average wage rates set by the boards have remained virtually stationary during that time, the nominal drop even during the depression averaging only a shilling or two a week. Miss Sells ascribes this seeming stability in large part to the absence of rigidity in enforcement. She considers this a good thing, commenting: "Relentless enforcement in such times might cause unemployment and hardship that would tend to undermine

the Acts or bring the minimum wage rates down." Inspections, she tells us, average one in five years for a plant. She is more questioning concerning the "failure of the boards to demand basic factual data," but explains that to the Britisher such questioning would appear doctrinaire: "When you have secured your facts, what relative weights are you going to give to the various factors which may tend in opposite directions?"

Miss Sells does not force us through the maze of different rates for different trades and regions. Suffice it to say that in each there are separate rates for men, for women, for boys and for girls; and that agricultural workers have a wholly separate wage setting system, with very much lower rates. There are also numerous individual exemptions and long learning periods. For 1937, the last year covered by Miss Sells, the over-all average of minimum rates for experienced men and women workers under the Trades Boards was 49.2 shillings a week and 28 shillings, respectively; while male agricultural workers received 33 shillings a week, *i.e.*, a little more than the industrial women, but considerably less than the family unemployment benefit rates for men in cities. Moreover, there was wide variation in agricultural wage rates from county to county.

The American reader, impatient for results, may perhaps disagree with Miss Sells that "in comparison with the advantages peculiar to the democratic wages board method . . . its weaknesses seem unimportant, especially as they are, for the most part, the result of world economic conditions rather than any inherent defects of the system." However, he cannot but admire the admirably clear and orderly way in which Miss Sells has marshalled her material and her arguments.

DOROTHY W. DOUGLAS

STITT, L. and SMITH, F. P. *Progress of state minimum-wage legislation in 1939.* From *Monthly Labor Review,* Feb., 1940. (Washington: Supt. Docs. 1940. Pp. 13.)

SUTCH, W. B. *New Zealand's labor government at work.* (New York: League for Industrial Democracy. 1940. Pp. 32. 15c.)

SWAYZEE, C. O., and others. *Eight years of unemployment in Lincoln, Nebraska, 1932-1939.* Stud. in bus. no. 45. (Lincoln: Univ. of Nebraska. 1940. Pp. 33. 50c.)

TELLER, L. *The legality of picketing.* Contemp. law pamph., ser. 1, no. 28. (New York: New York Univ. Law Quart. Rev. 1940. Pp. 68. $1.)

WEBB, J. N. and BEVIS, J. C. *Facts about unemployment.* Soc. prob. no. 4. (Washington: Supt. Docs. 1940. Pp. 34.)

WEST, M. E., FITZGERALD, E. J. and BIRD, G. L. *Employment and unemployment in a depressed labor market: Brazil, Ind.* Rep. no. L-9. (Philadelphia: WPA, Nat. Research Project. 1940. Pp. xv, 139.)

Commonwealth of Massachusetts: report of the Minimum Wage Commission for the year ending November 30, 1938. Reprint from annual report of Dept. of Labor and Industries. (Boston: State House. 1940. Pp. 18.)

Earnings and hours in the hat industries, 1939. Bull. no. 671. (Washington: Supt. Docs. 1939. Pp. vii, 44. 10c.)

First annual report of the administrator of the Wage and Hour Division, United States Department of Labor, for the calendar year 1939. (Washington: Supt. Docs. 1940. Pp. 163. 20c.)

Intermediate report of the Special Committee of the House of Representatives, 76th Cong., 1st Sess., appointed pursuant to H. Res. 258, to investigate the National Labor Relations Board. Parts 1 and 2. (Washington: Supt. Docs. 1940. Pp. 111; 78. 15c.; 10c.)

Labour's next step: a wartime strategy. Tract ser. no. 252. (London: Fabian Society. 1940. Pp. 18. 3d.)

Methods of collaboration between the public authorities, workers' organizations and employers' organizations. (Geneva and Washington: Internat. Labour Office. 1940. Pp. xii, 346.)

National Labor Relations act: hearings, 76th Cong., 3rd Sess., relating to proposed amendments to the National Labor Relations act. Vol. 9. (Washington: Supt. Docs. 1940. Pp. 2291-2831. 75c.)

Outline of industrial relations policies in defense industries. (Princeton: Princeton Univ. Industrial Relations Section. 1940. Pp. 47. 75c.)

Proceedings of the sixth national conference on labor legislation, Washington, D.C., November 13, 14, 15, 1939. Div. of Labor Standards bull. 35. (Washington: Supt. Docs. 1940. Pp. 109. 20c.)

Report on progress of the WPA program, June 30, 1939. (Washington: Federal Works Agency. 1939. Pp. xi, 185.)

Detailed account of the work of this bureau, including financial statements.

Rights of labor: hearings, 76th Cong., 2nd Sess., pursuant to S. Res. 266 (74th Cong.) to investigate violations of the right of free speech and assembly and interference with the right of labor to organize and bargain collectively. Part 48. *California agricultural background, Marysville, Calif., incident, May–July, 1939, the Earl Fruit Company, the Associated Farmers of California, Inc., the Associated Farmers of Sutter County, Inc., the Associated Farmers of Yuba County, Inc., San Francisco, Calif., Dec. 14 and 15, 1939.* Part 49. *Financing of the Associated Farmers of California, Inc., Yolo County apricot strike, June, 1937, the Associated Farmers of Yolo County, Inc., registration of field workers, Contra Costa County, 1934-1939, the Associated Farmers of Contra Costa County Inc., Balfour-Guthrie Investment Co., San Francisco, California, Dec. 16 and 18, 1939.* Part 50. *California agricultural background, Stockton, California, strike, 1937, Associated Farmers of San Joaquin County, Inc., Associated Farmers of Stanislaus County, Inc., California Processors and Growers, Inc., San Francisco, California, Dec. 18 and 19, 1939.* Part 51. *California agricultural background, cotton in California, Anderson, Clayton and Co., Agricultural Labor Bureau of San Joaquin Valley, Madera, Calif., cotton strike, 1939, San Francisco, California, Dec. 20 and 21, 1939.* (Washington: Senate Educ. and Labor Committee. 1940. Pp. 17465-17908; 17909-18195; 18197-18572; 18573-19002. 60c.; 45c.; 50c.; 50c.)

Silicosis: proceedings of the international conference held in Geneva from 29 August to 9 September, 1938. Stud. and rep., ser. F, no. 17. (Geneva and Washington: Internat. Labour Office. 1940. Pp. iv, 223. $1.25.)

The wage and hour structure of the furniture-manufacturing industry, October, 1937. U. S. Bur. of Labor Stat. bull. no. 669. (Washington: Supt. Docs. 1940. Pp. xi, 121. 20c.)

Wage and hours of labour in Canada, 1929, 1938 and 1939. Issued as a supplement to the *Labour Gazette*, March, 1940. Rep. no. 23. (Ottawa: H. M. Stationery Office. 1940. Pp. 188.)

The war and after: labour's home policy. (London: The Labour Party. 1940. Pp. 11. 1d.)

Written trade agreements in collective bargaining. Nat. Labor Rel. Board bull. no. 4. (Washington: Supt. Docs. 1940. Pp. xiv, 359. 35c.)

Money, Prices, Credit, and Banking

Personal Finance Companies and Their Credit Practices. By RALPH A. YOUNG and Associates. Stud. in Consumer Instalment Financing, no. 1. (New York: Nat. Bur. of Econ. Research. 1940. Pp. xix, 170. $2.00.)

This volume constitutes a useful summary view of lending by personal finance companies and brings together into one comprehensive volume significant aspects of this type of lending which have been analyzed in a number of books produced under the aegis of the Russell Sage Foundation and by various experts associated with personal finance companies. The authors have borrowed generously from the pioneer works in the field and have classified and interpreted data supplied by personal finance companies and by state regulatory authorities.

The chapter headings indicate the scope of the study: "Significance of personal finance company credit," "The loan and its market," "Operating methods and collection experience," "Credit standards," "Expenses and income," "Rates of charge," "The effects of changes in maximum legal rates," "Relations among lenders." An eighteen-page summary survey gives briefly the highlights of the work and the subsequent chapters are merely a more extensive presentation of topics covered in the summary.

There is no longer doubt that the service rendered by small-loan companies is important to the economy; nor is there doubt that one of the most significant results is the elimination of the loan shark and the salary grabber. But the new loan agency is not without defects. One of the evils is the large percentage of repeat borrowers. Thus it is reported (p. 6) that more than one-half the loans are made to former and present borrowers. One large chain reports that the majority of its loans terminate in new loans. This is a serious problem for companies lending to necessitous borrowers at rates ranging up to 3½ per cent per month, and it must mean a substantial inroad upon the total purchasing power of the needy borrowers. It is reported that three-fourths of the loans are made to those with incomes ranging from $1,000 to $2,500 per year (p. 54).

The authors indicate that the cost of lending tends to decline with increased volume but that it is not yet known what is the most profitable size for a lending office (pp. 114-115). Perhaps this is one of the most significant generalizations reached as it points to the desirability of limiting the number of licenses to the end that units are large enough to make it unnecessary to exploit the borrowers.

In a footnote on page 127 the authors attempt to answer the charge that the rate of 3½ per cent monthly is really 51 per cent a year "effective" interest. "This, however," they say "is not very reasonable. If a personal finance company could reinvest each month 100 per cent of its gross earn-

ings, representing 100 per cent collections on employed assets, it would indeed show a return of 51 per cent. . . ." Which is a prize *non sequitur* and entirely irrelevant. No one has claimed that the company earns 51 per cent and it is difficult to see how the earnings of the lender have any necessary quantitative relation to what the borrower pays. Logically, from this statement, it would follow that one who borrows from a commercial bank at 6 per cent really does not pay 6 per cent if perchance, as has been the case so frequently in recent years, the bank makes no profit. The protagonists of small-loan companies do them no service by ignoring mathematics. What the borrower pays gives no knowledge as to what the lender earns, following deduction of costs from gross receipts. If 51 per cent effective interest is necessary to give such a return as to warrant investment in this field, why not say so and then proceed to explain why such a rate is needed?

CLYDE OLIN FISHER

Wesleyan University

NEW BOOKS

ATKINS, P. M. *Bank bond investment and secondary reserve managément.* (Boston: Bankers Pub. Co. 1940. Pp. 415. $5.)

BACKMAN, J. *Price flexibility and inflexibility.* Contemp. law pamph. (New York: New York Univ. School of Law. 1940. Pp. 49. $1.)

This pamphlet reviews the discussions of price flexibility by G. C. Means and his critics. It makes some good suggestions with reference to definitions and the variety of factors that may cause inflexibility. It also contains an elaborate analysis of the commodities included in the B.L.S. index showing that "standardized, non-durable, consumers', and raw material and semi-finished goods were generally flexibly priced (from 1929 to 1937) while inflexibility prevailed for durable, non-standardized, producers', and finished goods." Durability was easily the most significant characteristic of inflexible goods, and concentration of control is not the primary explanation, according to Dr. Backman.

Although the author believes that the effect of inflexibility in prolonging or intensifying depressions has been exaggerated, and that several suggested cures for inflexibility would either fail to attain their object or have worse effects, he advocates certain mild measures to limit the area of inflexibility. This is a soundly reasoned contribution to the literature of current economic problems.

R. S. TUCKER

BRESCIANI-TURRONI, C. *The economics of inflation: a study of currency depreciation in post-war Germany.* Translated from the Italian by MILLICENT E. SAYERS. Halley Stewart pubs. no. 4. (New York: William Salloch. 1940. Pp. 464. $7.50.)

CHAPMAN, J. M., and associates. *Commercial banks and consumer instalment credit.* Stud. in consumer instal. finan., 3. (New York: Nat. Bur. of Econ. Research. 1940. Pp. xxiv, 318. $3.)

GROBBEN, M. *Industrial banking: a phase of consumer credit.* (New York: Consumer Credit Inst. of America. 1940. Pp. ix, 116. $1.50.)

Examination of the bibliography of this book reveals the paucity of published material on industrial banking. P. W. Herzog's study of the Morris

Plan, published twelve years ago, dealt with only one type of industrial bank and it is in any case completely out of date. The more recent literature, consisting of articles in periodicals, can have been merely of incidental assistance to Miss Grobben whose book, based on careful research and long acquaintance with industrial banking, constitutes the first comprehensive treatment of the subject.

While recognizing that the industrial bank tends to lose its distinctive character as it expands its banking services to include savings and checking accounts and various types of loans, Miss Grobben is concerned primarily with the industrial bank's extension, to consumers and small business-men, of loans repayable in periodic installments. The methods of making these loans, the various rates and charges, and the clauses of the borrower's contract are described. Particularly useful is the chapter which summarizes the industrial banking legislation of each of the states. The relation of industrial banks to other consumer lending agencies, and especially to the personal loan departments of commercial banks, is discussed; and in her conclusion Miss Grobben suggests briefly the function of consumer credit and the development which it may be expected to follow. The usefulness of the book is increased by an excellent index.

HENRIETTA C. JENNINGS

HUNT, P. *Portfolio policies of commercial banks in the United States, 1920-1939.* Stud. no. 24. (Boston: Harvard Univ. Bur. of Bus. Res. 1940. Pp. v, 58. $1.50.)

Discusses causes of changes. Evidence shows that "businesses have reduced bank loans by reinvestment of savings and sale of long-term bonds or stocks."

KELSO, R. W., editor. *Consumer credit.* Proceedings of conference under joint auspices of Inst. of Public and Soc. Admin. and School of Bus. Admin., Univ. of Michigan, Ann Arbor, Jan. 17-19, 1940. Michigan bus. papers no. 9. (Ann Arbor: Univ. of Michigan. 1940. Pp. vi, 137. $1.)

KEMMERER, E. W. *Inflation and revolution: Mexico's experience of 1912-1917.* (Princeton: Princeton Univ. Press. 1940. Pp. xiv, 173. $2.50.)

———. *Our present gold problem.* Address before annual convention of Manufacturers' Assoc. of N. J., Atlantic City, May 4, 1940. (Jersey City: Hugh W. Long. 1940. Pp. 18.)

MORGENTHAU, H. *Address before the National Institute of Government, Washington, D. C., Friday, May 3, 1940.* (Washington: U. S. Treasury Dept. 1940. Pp. 11.)

Discusses more particularly our gold problem.

MYERS, M. G. *Monetary proposals for social reform.* (New York: Columbia Univ. Press. 1940. Pp. x, 191. $2.25.)

PETERSEN, E. *Macro-dynamic aspects of the equation of exchange.* (Oslo: Jacob Dybwad. 1938. Pp. 116.)

This is a painfully thorough examination of problems connected with the industrial circulation. Despite its title, the analysis is only occasionally dynamic (in the sense of Frisch). It is doubtful whether the author will win many new converts to the view that the equation of exchange provides a fruitful approach to the problems of monetary and business-cycle theory.

PAUL A. SAMUELSON

PLUMPTRE, A. F. W. *Central banking in the British Dominions.* (Toronto: Univ. of Toronto Press. 1940. Pp. xv, 462. $4.)

QURESHI, A. I. *State banks of India.* (New York: Macmillan. 1940. Pp. 256. $4.25.)

RICCI, U. *La politica annonaria dell' Italia durante la Grande Guerra.* Bibl. di Cultura Moderna n. 344. (Bari: Laterza. 1939. Pp. 363. L. 25.)

This is a revision of Professor Ricci's *Il Fallimento della Politica Annonaria,* published in 1921. The author examines critically the Italian experience with price-control, and its accompaniment of embargoes and rationing, during the first World War. His conclusions are decidedly adverse. He finds that the restrictions discouraged essential productive activities, that consumption was stimulated when it ought to have diminished, that commodities were wasted, that transportation was disorganized, that the burdens of the state were unnecessarily increased, that there were serious vexations for producers and consumers. He abhors the inefficiency of the large bureaucracy required by the controls, as well as the attendant corruption. An inflated officialdom, thus made powerful, grasps for more power and threatens to become an end in itself. Such is "the outcome of every kind of socialization." Economic liberalism—that is the only escape.

It is interesting that such a book reappears in the Italy of fascism and the corporate state. Much water has flowed under the bridges since 1921. The liberal economy advocated by Professor Ricci has not been restored. Rather, Italian politicians say that it is long since dead and buried, and they may be right. Regulations of the kind described by the author have been extended, and new controls set up. And the errors, wastes, and corruption that he justly deplores are no doubt many times multiplied under the corporate state. Yet it must be said that his conclusions seem beside the point. They ignore realities of the machine technology, which, especially in war, drive even the liberally inclined economies toward a conscious integration of controls. The question is not: Control or no control? It is: Control by whom and for what ends?

CARL T. SCHMIDT

RODKEY, R. G., editor. *Bank investments and reserves.* Proceedings of second annual Michigan Bankers Association study conference, Dec. 6-7, 1939. (Ann Arbor: Univ. of Michigan. 1940. Pp. iii, 84. $1.)

The first conference of the Michigan Bankers Association, held in December, 1938, was devoted entirely to bond investment policies. In view of the continued importance of this phase of bank management, the second conference gave major emphasis to the problem of bank investments and the maintenance of proper reserves against all earnings assets.

Two papers, those of Professor R. C. Rodkey and of Mr. J. Van Dyke Norman, Jr., dealt with the matter of reserves, although from somewhat different points of view. Professor Rodkey defined the various types of reserves to which earnings assets should be apportioned and discussed the extent to which such reserves should be built up in order to provide adequate liquidity for banks under all conditions. Mr. Norman discussed the extent to which reserves should be set up from earnings on specific types of earning assets in order to provide for subsequent capital losses.

In a series of three papers, Mr. L. R. Lunden developed first a set of well defined principles to assist in the proper selection of investment risks, in the

proper supervision of bonds that have been purchased, and in minimizing the risk of fluctuations arising from changes in money rates by means of a proper staggering of maturities. This general discussion was followed by a consideration of specific methods to be employed in analyzing municipal and public utility issues.

Professor Seltzer in his discussion of "Banks and the government bond market" emphasized the difficulty of predicting market movements in government bonds. The extreme spread in yield between short-term and long-term governments in the present market clearly indicates the desire of bankers to maintain a high degree of liquidity. Long-term bonds should be purchased only where such bonds can be held until maturity.

The final paper, given by your reviewer, covered certain changes that have occurred in the last decade in the business of conducting commercial banks, the growing importance of the investment portfolio, the drastic reduction in interest rates, and the rather pronounced deterioration that has occurred in the capital ratios of commercial banks.

These three trends have made it increasingly necessary for banks to examine the risk involved in their investment portfolios. This risk may be expressed mathematically in terms of a "Factor of Safety," defined as the percentage of market decline that the bond account may experience before reserves, undivided profits, surplus, and finally the capital account are offset. This Factor of Safety varies among banks, depending on the percentage of earnings assets allocated to bonds, the capital ratio, and the book profit in the bond account. Through this approach, bankers can determine the amount of maturity or quality risk the bank can assume without creating an unsound situation.

The effect of deteriorating capital ratios in limiting the participation which banks may be expected to take in future government bond issues was also discussed.

RALPH E. BADGER

SALLS, C. M. *A price-level regulator.* (Boston: Christopher Pub. House. 1940. Pp. 32. $1.)

"Inflation and excessive speculation would be controlled by a mobile surtax structure that would deliver a rapidly increasing amount of revenue into the National Treasury to be used for the purpose of offsetting overexpansion of credit.

"On the other hand, deflation, excessive wage competition and unemployment would be controlled by distribution of Social Dividends directly to consumers, the amount of purchasing power so distributed being increased very rapidly with each point drop below 90 in the price-level index."

Actividades del Banco Obrero in 1939. (Mexico: Banco Obrero. 1940. Pp. 42.)

Banco Central de Reserva del Perú: memoria, 1939. (Lima: Banco Central de Reserva del Perú. 1940. Pp. 92.)

Credit administration. (New York: Am. Inst. of Banking. 1939. Pp. 387. $3.50.)

Reglementation du commerce des devises: France. 2nd ed. (Basel: Banque des Reglements Internat. 1940. Pp. 38.)

Silver Purchase act: hearing, 76th Cong., 3rd Sess., on S. 785, bill to repeal the Silver Purchase act of 1934 to provide for the sale of silver and for other purposes. Part 2. *March 19, 1940.* (Washington: Senate Banking and Currency Committee. 1940. Pp. 151-252. 15c.)

Public Finance, Taxation, and Tariff

Local Government Debt Administration. By CARL H. CHATTERS and ALBERT M. HILLHOUSE. (New York: Prentice-Hall. 1939. Pp. xii, 528. $5.00.)

The authorship of this long awaited, comprehensive, and well written volume insures that it will represent a happy combination of principle and theory with concrete and practical advice on debt management. Mr. Chatters is executive director of the Municipal Finance Officers' Association of the United States and Canada, and Dr. Hillhouse, a professor of economics at Davidson College. In the preface the reader is told that the book "has been written for public officials, bond dealers and teachers and students of public administration." There is a wealth of material which will be of interest and value to all of these, and much that will appeal to the general reader.

When the authors deal with such subjects as advertisement and sale of bonds, making bond and interest payments, debt reporting, debt adjustments, etc., the work is addressed primarily to municipal administrators. In the chapters dealing with sinking fund administration, short-term borrowing and funding, special assessment bonds, municipal utility debt, formulation of a debt policy, the point of approach is essentially that of an economist interested in sound policy affecting budgets, public borrowing and financial administration.

Without appendices and index the book contains but 397 pages. The reader is impressed by the huge amount of material that crowds its pages and the fact that no essential aspect of municipal debt policy or administration has been slighted. At certain points the reader is tempted to say that the authors go too much into detail covering procedures that are obvious or matters connected with the engraving and printing of bonds that could best be left to the advice of the printer. In the chapter on debt adjustment this confusion of detail is most manifest.

The reader is impressed throughout by the insight and practical experience of the authors and the soundness of the advice they have to offer. Although much pertinent advice is given on short-term borrowing and refunding operations, the book is replete with constructive suggestions of ways to avoid floating debts and the necessity for refunding operations. Municipal officials are cautioned against allowing the refunding process to become a habit. The authors cite a classic example of a city's debt, originally $20,000, incurred in 1866, increased by $35,000 in 1871, and refunded at recurring periods until finally paid in 1928. In the meantime, an interest obligation of $199,580 had been incurred and paid. The pay-as-you-go policy is upheld as the ideal for city governments. By careful planning of capital outlays arranged in sequence, especially in the larger cities, the necessity for borrowing might be avoided and the cost of public improvements greatly reduced. Since the burden under tax payments would

be immediate and undisguised, extravagant outlays would be avoided. In case tax limitations or large non-recurring capital outlays stand in the way of payment by a single levy, the authors favor accumulation of reserves by tax levies spread over a period of years. The book reveals a certain partiality for general obligation bonds to finance street improvements and for buying or building public utility plants. The city should, of course, make sure that the improvements are necessary, the special assessments collectible, and the utility enterprise a self-liquidating one. Under proper safeguards the credit of the city will not be impaired and the general obligation bonds can be marketed on better terms.

JAMES H. GILBERT

University of Oregon

Trails to the New America. By JOHN W. HERRING. (New York: Harper. 1940. Pp. viii, 160. $2.00.)

In the preface to this book, the author expresses the view that economists are temperamentally unfitted for the task of devising practical ways of extracting the nation from the morass in which it is mired, hence it is up to the layman to do the job. The same line of reasoning obviously leads to the conclusion that laymen instead of engineers ought to design airplanes, and that laymen instead of bacteriologists should devise new remedies for disease.

The way in which the particular layman who writes this book proposes to remedy the nation's ills is to reduce profits and use taxation to cut down inequalities in wealth and income. His principal reason for favoring redistribution of income and wealth is to curtail saving and encourage spending, for he feels that the chief obstacle which prevents us from attaining the more abundant life is oversaving. He contends that this process reduces purchasing power until it is insufficient to buy the total supply of goods produced. As long as wealth is largely concentrated in the hands of the rich, they receive in dividends and interest a large share of the nation's value product. Since they do not care to spend all of their income for direct goods, they have billions left which they would like to invest. However, the amount of spending for direct goods does not generate a demand for machines and equipment large enough to absorb the savings available for investment. As a result, the savings are used for gambling in the stock market, and booms thus generated bring about panics. The growth of debt is a bad thing primarily because it increases the volume of interest payments and thus tends to concentrate income in the hands of the wealthy.

In an attempt to prove his thesis, the author cites numerous figures. Both the figures and the uses which he makes of them are often questionable. For example, he states that, in the United States, the total debt increased from 180 billions of dollars in 1922 to 280 billions in 1929. According

to *Dun's Review* of April, 1940, the increase was from around 85 billions to 122 billions. This latter figure is a far cry from 280 billions. Furthermore, the figures which Mr. Herring gives in his text show little connection with the supporting data cited in his footnote on page 155. We are also left in the dark as to how he knows "that savings jumped from between 7 and 8 billion dollars in 1922 to 17 billion dollars in 1929." He quotes an unknown authority to the effect that interest charges totaled 7½ billion dollars in 1929, but Robert R. Nathan's estimate, made for the Division of Economic Research of the federal government, is only 5⅓ billions. He shows that, between 1929 and 1932, realized national income dropped 54 per cent, while Nathan's figures record a decline of less than 39 per cent. He states that, in 1932, debt "service" (interest, etc.) took 20 cents out of every dollar. However, according to Nathan, interest took but 10.7 per cent. He holds that half of the national income went to the richest eighth of all families, but the report of the National Resources Committee shows that half went to the richest fifth. He says that the income of the 4,000 richest families averaged 1,800 times as much as the income of the 6,000,000 poorest families. According to the National Resources Committee, incomes of the 6,711,000 poorest families averaged around $307 per year. Federal income tax reports for 1935 show that the 2,647 richest income taxpayers had average incomes of $216,000. The ratio between these two figures is about 700 to 1 instead of 1,800 to 1. In general it may be said that the quality of the arguments in the book is about on a par with the accuracy of the figures upon which the conclusions are based.

The answer to Herring's oversaving argument is admirably presented in Carl Snyder's latest work, *Capitalism, the Creator,* in which he shows that, without abundant saving in the past by the wealthy, the income of the ordinary American family would today be but a fraction of what it is.

The effort of Mr. Herring to solve, as a layman, the economic problems of the nation is best characterized by his quotation from *Porgy and Bess:* "Ah got plenty of nuthin' . . . but it ain't necessarily so."

WILLFORD I. KING

New York University

The Business Man's Stake in Government Finance. By HARLEY L. LUTZ. (Stanford University, Calif.: Stanford Univ. Press. 1939. Pp. 119.)

The book consists of a series of five lectures delivered by Professor Lutz before the third annual business conference at Stanford University. The use of analogies and illustrations drawn from business, and especially the fact that it is a defense of the business-man's interest in federal finance, will give it wide appeal to business executives.

The debt policy, and especially the investor's stake in government finance

are ably discussed. To Lutz, the use of open market transactions for the purpose of sustaining bond yields and prices is equivalent to "wash selling" in private finance, and is regarded by him as "dangerous and undesirable under all circumstances" (p. 37). Professor Lutz does not believe that government, in arranging its financial policy, should, in any respect, recognize the economic cycle. Cyclical adjustments should be left entirely to the forces of competitive economy. The fourth lecture is an excellent and convincing criticism of the current trend toward the taxation of public securities. If immunity to public securities is discontinued, the advantage would be definitely in the interest of the federal government with little to be gained by the state and local governments. And all gain would be more than offset by the losses in increased burdens upon the taxpayers, particularly those paying to local governments.

The case against borrowing for relief, or for other current purposes, is convincingly stated through the argument that taxation merely transfers, and does not reduce purchasing power. But in that respect the same relation holds in the case of borrowing as in taxation for current purposes, provided there are no net additions to the money medium. And the fact that there are strong economic and political arguments for not subjecting the tax system to the shock of extraordinary demands during depression conditions should have been recognized. The argument against borrowing for current purposes, such as relief, is developed through an analogy in capital debt retirement. The contention that the business rule that debt incurred for capital equipment should be retired during the useful life of such equipment should also hold for government debt retirement for capital purchases undoubtedly appeals to the cold reasoning of the business executive. Nevertheless, the structure and processes of organized society are so different from those of a private business unit organized for profit, that it is doubtful if the analogy can be rigorously applied, even in the case of capital equipment—and certainly there is little analogy when it is a problem of public borrowing for human subsistence and sustained public morale in the depths of severe depression. The crucial weakness in relief financing in extraordinary amounts is in the policy and method of debt retirement rather than in the fact that resort is had to borrowing.

To Lutz, the notions of "ability to pay" and "tax rate progression" have no place in realistic finance. He prefers a moderate gross income tax to the net income tax, which he considers "little more than a vast hoax." Taxpaying ability is not cumulative. It is not measured at the end of the year by a summation of receipts during the year. It becomes zero after the spending of each salary installment and only the surplus carried over to the end of the year can be regarded as net income. His reasoning on this point undoubtedly demands respect.

These lectures constitute a valuable contribution to the critical literature in federal finance, and they should prove stimulating to all students in that phase of the science.

ROSCOE ARANT

University of Mississippi

NEW BOOKS

BAUER, J. *National welfare and business stability: the permanent functions of public spending.* (New York: Harper. 1940. Pp. xi, 182. $2.)

BROWN, F. H., GIBSON, J. D. and PLUMPTRE, A. F. W. *War finance in Canada.* (Toronto: Ryerson Press. 1940. Pp. 110. 75c.)

BUEHLER, A. G. *Public finance.* 2nd ed. (New York: McGraw-Hill. 1940. Pp. xx, 846. $4.)

COMPTON, R. T. *The social security payroll taxes.* (Chicago: Commerce Clearing House. 1940. Pp. xvii, 446. $5.)

"This book seeks to provide a guide to the rules by which the payroll taxes are administered and by which their cost to the taxpayer may be minimized. It is offered primarily to three types of readers—the employer-taxpayer and his agents, the tax administrator and the university student."

DICKINSON, F. G. and EAKIN, F. *The Illinois segment of the nation's economy for 1935: a bookkeeping picture.* Bull. no. 60. (Urbana: Univ. of Illinois Bur. of Bus. Res. 1940. Pp. 132.)

EINAUDI, L. *Miti e paradossi della giustizia tributaria.* 2nd ed. (Turin: Einaudi. 1940. Pp. 308. L. 20.)

GRIZIOTTI, B. *Primi elementi di scienza delle finanze.* (Milan: Casa Ed. G. Principato. 1940. Pp. 294. L. 18.)

HUNTER, M. H. and ALLEN, H. K. *Principles of public finance.* (New York: Harper. 1940. Pp. xx, 672. $3.50.)

JOSEPH, I. S. *The debt problem and its effect upon our economy.* (New York: Author. 132 W. 31st St. 1940. Pp. 33.)

MEECE, L. E. and SEAY, M. F. *Financing public elementary and secondary education in Kentucky.* Bull. vol. 12, no. 1. (Lexington: Univ. of Kentucky Coll. of Educ. 1939. Pp. 182. 50c.)

VALLARINO, J. C. *Estudios sobre impuestos hipotecas y moneda.* (Montevideo: Impresora Moderna. 1939. Pp. 225.)

This book is a collection of papers dealing with the following: the theory of sumptuary taxes, the rôle of such imposts in the Uruguayan fiscal system; revenue yielded in Uruguay by the several categories of taxes, statistics concerning Montevideo's municipal tax structure, and the development of national mortgage credit in the decennium 1926-1936. Except for the matter of sumptuary taxes, the papers are largely factual. That dealing with Montevideo's finances is particularly good, for the author's critical attitude on this topic both enlivens the discussion and brings into focus many of the weaker aspects of the city's fiscal position. Charts and graphs are employed to advantage in connection with the material on mortgage credit. Unfortunately, when considering the several types of taxes, little attention is devoted to the important problem of the extent to which it is practicable to carry direct taxation in a country such as present-day Uruguay.

VIRGIL SALERA

Equalization agencies. 6th progress rep. of Committee on Assessment Organization and Personnel. (Chicago: Nat. Assoc. of Assessing Officers. 1940. Pp. 58. $1.)

Exemption and preferential taxation of factories. Bull. no. 24. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 13. 50c.)

In practice 26 states treat manufacturing machinery for tax purposes just as they treat other tangible personal property; 6 classify various types of tangible personalty and more frequently than not provide a favorable differential for manufacturing property; 5 other states provide more or less permanent partial or complete exemption for certain industrial property; and 15 offer temporary exemptions under certain circumstances. These facts together with an abstract of statutory provisions for such differential treatment in each state are outlined briefly and succinctly in this pamphlet.

JAMES W. MARTIN

Exemption and preferential taxation of homesteads. Bull. no. 20. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 15. 50c.)

This brief monograph presents a completely objective report on the homestead tax preference movement of the last eight years. In the first place, however, the author emphasizes that the movement originated at least twenty years earlier. The varieties of homestead tax preference and tax exemption legislation are classified as (a) taxation at preferential rates (Minnesota and Iowa), (b) exemption from state levies only (Alabama, Arkansas, Minnesota, South Dakota, and Texas), (c) exemption from certain levies of the state and of some, but not all, local governments (Georgia, Louisiana, and Mississippi), and (d) exemption from levies of all governments (Florida, Louisiana, Oklahoma, and Wyoming—although there are certain exceptions in the first two). The value, area, use, and other limitations on the operation of these preferential enactments and also the fiscal consequences of the laws are briefly analyzed.

JAMES W. MARTIN

Illinois tax problems: proceedings of an open forum on taxation and tax problems in Illinois. Spec. rep. no. 5. (Chicago: Illinois Tax Commission. 1940. Pp. xii, 423.)

L'imposta sul patrimonio in Italia ed all' estero. (Rome: Assoc. fra le Società Italiane per Azioni. 1939. Pp. 155. L. 12.)

A few months ago, the first regular probate duty came into force in Italy, in conformance with a new royal bill decreed last year. What are the fundamental principles of this modern form of direct taxes, existing only in a few European states and the United States? Italy's "imposta ordinaria sul patrimonio," whose legal basis (decree-law no. 1529, dated October 12, 1939) is fully reprinted in the appendix, shows the following characteristics: general levy on *all* inherited patrimony, if succession on Italian territory; taxation of physical and juridical persons, *independent* of their economic conditions (*real* tax, not personal tax); valuation on a three years' average preceding the heritage; avoiding of double impost.

Probate duties are in existence also in Germany, the Netherlands, Denmark and Finland. In Switzerland there are probate duties in some cantons. A special chapter of the book deals with North America's general and classified property taxes.

PAUL UCKER

Property taxation of intangibles. Bull. no. 21. (Chicago: Nat. Assoc. of Assessing Officers. 1939. Pp. 13. 50c.)

This pamphlet constitutes a summary of the provisions for the taxation of "representative intangible property" in the several states. The facts are brought together effectively and with extraordinary economy of expression, so that in the 13 pages the reader may get a complete view of the policies of state legislatures regarding methods, rates, and administration.

The author appears (p. 12 as compared with n. 1, p. 1) to regard "corporate excess" as *representative* intangible property—a view not commonly held.

JAMES W. MARTIN

Property taxes: symposium conducted by the Tax Policy League, December 27-29, 1939, in Philadelphia, Pennsylvania. (New York: Tax Policy League. 1940. Pp. vi, 288. $2.50.)

Tax yields: 1939. Tax collection statistics for the various units of government with explanatory text and analysis. (New York: Tax Policy League. 1940. Pp. xi, 126.)

"For the past three years the Tax Policy League has been concerned with the collection of state tax yield statistics. This year, with the aid of Commerce Clearing House, Inc., the League has been enabled to expand its compilation to include federal and local statistics, and also to present comparative figures for several years. It is now offering what is believed to be the most complete information on tax collections in this country ever made available in a single volume.

"This volume is an attempt to show what the people of the United States are paying in taxes, to what units of government they are paying them, and through what taxes."

Population and Migration

NEW BOOKS

DUTT, S. N. *The population studies of Benoy Sarkar.* (Calcutta: Chuckervertty Chatterjee. 1939. Pp. 28. 4 annas.)

GREEN, H. W. *Infant mortality and economic status, Cleveland five-city area.* (Cleveland: Cleveland Health Council. 1939. Pp. 123. $1.)

LEYBOURNE, G. G. and WHITE, K. *Education and the birth-rate: a social dilemma.* (London: Jonathan Cape. 1940. Pp. vii, 375. 10s. 6d.)

Norwegian-American studies and records. Vol. xi. (Northfield, Minn.: Norwegian-American Hist. Assoc. 1940. Pp. vii, 183. $2.)

Among the studies is one on Norwegian emigration to America during the nineteenth century.

Social Problems and Reforms

NEW BOOKS

BIRD, C. *Social psychology.* (New York: Appleton-Century. 1940. Pp. 577. $3.50.)

CAYTON, H. R. *Negro housing in Chicago.* Vol. 6, no. 4. (New York: Social Action. 1940. Pp. 39. 15c.)

CLARKE, H. I. *Social legislation: American laws dealing with family, child, and dependent.* (New York: Appleton-Century. 1940. Pp. 570. $4.50.)

COTTRELL, W. F. *The railroader.* (Stanford University, Calif.: Stanford Univ. Press. 1940. Pp. ix, 145. $2.)

The author, "born into a railroad family," interestingly narrates his experience and the social environment of this life.

DAWSON, C. A. and YOUNGE, E. R. *Pioneering in the prairie provinces: the social side of the settlement process.* Canadian frontiers of settlement, vol. iii. (Toronto: Macmillan. 1940. Pp. xi, 338. $4.50.)

Contains chapters on the settlement cycle in the prairie region, agricultural practices, social background of pioneer families, expenditures of farm families, and religious and educational institutions.

FINE, R. compiler. *The national health program and medical care in the United States: selected recent references.* (Washington: U. S. Dept. of Labor Library. 1940. Pp. 25.)

FRIEDLANDER, W. and MYERS, E. D. *Child welfare in Germany before and after naziism.* (Chicago: Univ. of Chicago Press. 1940. Pp. xii, 273. $1.50.)

This represents a scholarly, objective presentation of the legal and political backgrounds of the child welfare program in Germany before and since 1933. The study does not purport to be a comprehensive history of child welfare in Germany, but it is a description of the trends in the services for German youth during the twentieth century. Changes in child welfare policy since 1933, under the influence of the national-socialist doctrines, are lucidly explained. The tremendous strides made by Germany for the care, protection and development of children as exemplified in the National Child Welfare law of 1922, have been lost in the aims and policies of the nazi régime. The ideals of constructive coöperation, mutual assistance and individual personality development, in fact, the basic concepts of child welfare and education have been changed under naziism.

The study is carefully documented, and is made more impressive by the factual data contained in the numerous statistical tables in which certain trends are clearly established.

A lucid, readable and convincing account of the effects of the national-socialist doctrines on child welfare and education is made available in this timely volume.

ELIZABETH REDDEN

GRIFFITH, E. S. *The impasse of democracy: a study of the modern government in action.* (New York: Harrison-Hilton. 1940. Pp. 380. $3.)

GUILLES, C. *The forgotten gospel.* (Dobbs Ferry: Clermont Press. 1940. Pp. 395. $2.50.)

HART, P. D'A. and WRIGHT, G. P. *Tuberculosis and social conditions in England, with special reference to young adults: a statistical study.* (London: Nat. Assoc. for the Prevention of Tuberculosis. 1939. Pp. vii, 165. 3s.)

This report examines closely a pressing problem of tuberculosis—the lack of improvement of mortality rates among young men and women since the beginning of the century. The unsatisfactory trend appears to be consequent upon two main social changes, standard of living (particularly overcrowding) and increased industrialization of young women.

HARTMANN, G. W., editor. *Industrial conflict: a psychological interpretation.* 1st yearbook of Soc. for Psych. Stud. of Soc. Issues, an affiliate of Am. Psych. Assoc. (New York: Cordon Co. 1939. Pp. xi, 583.)

HARWOOD, S. *How to work with people: scientific methods of securing coöperation.* (Cambridge: Cambridge Analytical Serv. 1940. Pp. 197. $2.50.)

LEWIS, W. A. *Economic problems of to-day.* (New York: Longmans Green. 1940. Pp. xii, 179. $1.25.)

ODUM, H. W., MEYER, H. D., HOLDEN, B. S. and ALEXANDER, F. M. *American democracy anew: an approach to the understanding of our social problems.* (New York: Holt. 1940. Pp. vi, 614. $1.40.)

THOMAS, R. B. *The health services: report to an Oxford committee of the Fabian Society.* Res. ser. no. 49. (London: Fabian Soc. 1940. Pp. 44. 1s.)

Covers maternity and child welfare, school and tuberculosis services.

UHL, W. L. and POWERS, F. F. *Workbook and study guide to accompany Personal and social adjustment.* (New York: Macmillan. 1939. Pp. 48. 24c.)

WARREN, R., WOLMAN, L., CLAY, H. and TWEEDSMUIR, BARON. *The state in society.* (New York: Oxford Univ. Press. 1940. Pp. 140.)

Nine lectures, including "The state and the business organization," by Robert Warren; "The meaning of employment and unemployment," "Labor relations since the war," and "Industrial democracy," by Leo Wolman.

Family income and expenditure in New York City, 1935-36. Vol. 2. *Family expenditure.* Bull. 643. (Washington: U. S. Bur. of Labor Stat. 1939. Pp. 231. 30c.)

Family income and expenditures in nine cities of the East Central region, 1935-36. Vol. 1. *Family income.* Bull. 644. (Washington: U. S. Bur. of Labor Stat. 1940. Pp. 538. 75c.)

Family income and expenditures in selected southeastern cities, 1935-36. Vol. 2. *Family expenditure.* Bull. 647. (Washington: U. S. Bur. of Labor Stat. 1940. Pp. 298. 30c.)

Family income and expenditures in selected urban communities of the West Central-Rocky Mountain region, 1935-36. Vol. 2. *Family expenditure.* Bull. 646. (Washington: U. S. Bur. of Labor Stat. 1940. Pp. 313. 30c.)

Quantity and cost budgets for four income levels: prices for San Francisco, March, 1940. (Berkeley: Heller Committee for Res. in Soc. Econ., Univ. of California. 1940. Pp. 107. 75c.)

Covers levels of executive, clerk, wage earner and dependent families.

Quantity and cost budget for a single working woman: prices for San Francisco, March, 1940. (Berkeley: Heller Committee for Res. in Soc. Econ., Univ. of California. 1940. Pp. 10. 15c.)

Insurance and Pensions

NEW BOOKS

ARMSTRONG, B. N. *The health insurance doctor: his rôle in Great Britain, Denmark and France.* (Princeton: Princeton Univ. Press. 1939. Pp. xii, 264. $3.)

Passage of the federal Social Security act opened a new era in American social security. From now on we shall rely more and more on our own experiences, much less on European. Books about social security with one exception already begin to reflect this shift. The exception is health insurance, where unless we borrow from Europe we are reduced to unrealistic philosophizing about vague and often windy proposals or an exchange of prejudices.

This latest book by Barbara Armstrong provides, in the usual thorough Armstrong manner, a documented study, in part made on the ground, of a special phase of our last terra incognita, compulsory health insurance. She

analyzes for three "democratic" countries, Great Britain, France and Denmark, the way in which health insurance affects the medical man and vice versa. Contrary to the opinion of most Americans, including American doctors, she concludes that "all three schemes aim to conserve certain essential elements of 'private practice.'" That is, broadly speaking, doctors compete for patients and patients are permitted free choice of doctor. Also, "in each country collective action by the organized medical profession plays a vital part in determination of the health insurance doctor's privileges, responsibilities and remuneration."

On one controverted point, Mrs. Armstrong takes a much more optimistic view than most authorities: on the alleged conflict between the doctor's duty on the one hand to give medical care to the insured person; on the other to certify (or refuse to certify) the insured person's incapacity for work as a condition of cash benefit. Medical men in all three countries, she concludes, accept the double task as an "inevitable responsibility." But is this the point raised by Falk and others? Medical men may well accept the double responsibility as inevitable and the charge that the two duties are mutually inconsistent and in combination dangerous could still be true.

Too detailed in part for the general or beginning reader, this book contains invaluable material for the specialist.

C. A. KULP

REED, P. B. *Fire insurance underwriting.* (New York: McGraw-Hill. 1940. Pp. ix, 380. $4.)

SCHNEIDER, W. R. *Complete compilation of American workmen's compensation laws: state, federal and territorial.* Vols. i and ii. (St. Louis: Thomas Law Book Co. 1939. Pp. 1674. $10, each.)

SIGERIST, H. E., and others. *Does America need compulsory health insurance?* America's Town Meeting of the Air bull., vol. 5, no. 15. (New York: Columbia Univ. Press. 1940. Pp. 33. 10c.)

The investment of the funds of social insurance institutions. Stud. and rep., ser. M, no. 16. (Geneva and Washington: Internat. Labour Office. 1940. Pp. 204. $1.25.)

Railroad Retirement Board: annual report for the fiscal year ended June 30, 1939 (with supplementary data, July 1—September 30, 1939). (Washington: Supt. Docs. 1940. Pp. 194. 25c.)

Pauperism, Charities, and Relief Measures

NEW BOOKS

ABBOTT, E. *Public assistance.* Vol. I. *American principles and policies: in five parts, with select documents.* (Chicago: Univ. of Chicago Press. 1940. Pp. xviii, 894. $4.50.)

GILBOY, E. W. *Applicants for work relief: a study of Massachusetts families under the FERA and WPA.* (Cambridge: Harvard Univ. Press. 1940. Pp. xviii, 273. $3.)

JACOBS, A. T. *Methods of clearance between unemployment compensation and relief agencies.* Pamph. ser. no. 3. (Washington: Soc. Sci. Research Council. 1940. Pp. 60. 50c.)

MILLETT, J. D. *The British Unemployment Assistance Board: a case study in administrative autonomy.* (New York: McGraw-Hill. 1940. Pp. 300. $3.)

Questions and answers on the WPA. (Washington: Federal Works Agency, WPA. 1939. Pp. 26.)

Socialism and Coöperative Enterprises

Economics of Socialism. By H. D. Dickinson. (London and New York: Oxford Univ. Press. 1939. Pp. x, 262. $3.25.)

The author examines the validity of the socialistic scheme of economic organization in the light of current economic science. In doing this he attempts to outline a plan that will be in harmony with the postulates of economic freedom for workers and consumers, and economic equality. The discussion includes traditional economic topics such as production, consumption, distribution, pricing, foreign trade, etc., and in each instance an attempt is made to select the best of the possible alternatives. The continuance of an economy of scarcity is assumed, and the proposed socialistic economy includes a pricing process, progressive income taxes, a managed currency, consumers' coöperatives, free individual choice of occupation and consumption, and frank recognition of the significance of rent, interest, and the element of risk. Perhaps most interesting of all, provision is made for a considerable range of private enterprise, especially in industries such as retailing, small-scale manufacture, and agriculture.

According to Professor Dickinson, "the essence of socialism is the abolition of class rather than the achievement of perfect equality of income" (p. 132). But any socialistic scheme must involve a plan of distribution, and in this instance it is proposed to establish a central social fund. Into this fund would go "the return to natural resources, interest on capital, and the surcharge on uncertainty" (p. 135). In addition to these shares the fund will receive all net surpluses of selling price above costs as shown by the socialist production and marketing organizations, taxes on undesirable consumption, and taxes on abnormally high personal earnings. From the fund must flow provision for that part of consumption which is communal, sufficient funds for capital accumulation, and personal allowances. Here we may quote directly from the author:

> The general picture of distribution is, then, of a society in which the imputed product of land, capital and uncertainty-bearing, and a portion of that of exceptional personal gifts would be paid into the Social Fund. Subject possibly to a levy for new capital and for social services, the imputed product of labour (wages) would be paid over to the worker, under contracts of employment with the organs of collective economy, forming part of his individual income. A large measure of equality in wage-income could be attained, partly by maintaining the fullest equality of opportunity, partly by the development of social services, and partly by special taxation on high incomes.
>
> Thus the total economic advantages enjoyed by an individual would be composed of two parts: one the use of the free goods and services (communal consumption); the other the goods and services purchased on the market (individual consumption). The money income to purchase the latter purchase might also consist of two parts: one would be earnings (less taxes and levies) for work done for the community; the other would be a payment irrespective of

work done, in the form of allowances based on need or of a Social Dividend (p. 137).

This compact little volume represents a skillful use of both logic and realism. The society pictured by Professor Dickinson is not a utopia, but a complex organization confronted with economic problems that are remarkably familiar. While the plan is assumed by the author to be truly socialistic, the position taken on many questions is distinctly middle ground. Doubtless the orthodox Marxians will claim that the scheme retains altogether too much of the old order. The opponents of socialism, on the other hand, will find comfort in the apparent absence of proletarian dictatorship, the emphasis upon individual freedom, and the assurance of a significant place for private enterprise. All in all, the socialism here portrayed is of a decidedly libertarian variety.

J. E. MOFFAT

Indiana University

NEW BOOKS

GITLOW, B. *I confess: the truth about American communism.* (New York: Dutton. 1940. Pp. viii, 611. $3.75.)

This is more than a personal confession; it is in fact a detailed account of Communist Party activities in the United States during a period of more than twenty years. The book is well organized and skillfully written. The introduction is by Max Eastman.

Those who are acquainted with the American communist movement will find here much that is familiar. Other readers will be especially impressed by three things: the extent and variety of communist activities in this country, the powerful and direct influence emanating from Moscow, and the persistent and bitter factional strife within the communist ranks. The book represents a significant addition to the literature dealing with radicalism in America.

J. E. MOFFAT

GORDIN, A. *Communism unmasked.* (New York: I. N. Hord. 1940. Pp. 311. $2.50.)

Adverse criticism of communism; "communism is not socialism but politicalism."

HEDBERG, A. *Swedish consumers in coöperation.* (New York: Coöp. League. 1939. Pp. 94. 25c.)

HIRSCH, M. *Democracy versus socialism: a critical examination of socialism as a remedy for social injustice and an exposition of the single tax doctrine.* 3rd ed. (New York: Henry George School of Soc. Sci. 1939. Pp. xxx, 468. $2.)

This is an unrevised third edition of a work first published in 1901. Although it aroused sharp criticism and wide discussion at that time, few present-day economists have a reading acquaintance with it.

The author, born in Germany in 1853, was a buyer of medieval rugs in Persia at the age of twenty, a student of art in Italy, a commercial traveller representing the British linen industry in Africa, and a coffee planter in Ceylon. In 1890 he settled in Australia as a business-man, a writer, and a member of the Legislative Assembly of Victoria. He died in 1909 in Vladivostok. Such

a life is, by any standards, unusual. In view of the eventfulness of his life and his lack of a formal university training, it appears surprising that he was able to present a comprehensive treatment of Marxian and other socialist thought.

The introduction sounds familiar and even contemporary. "The problem which, with ever-increasing urgency demands a solution at the hands of our society, is that of the persistence of undeserved poverty in the midst of abundant wealth; of unemployment in the midst of unsatisfied desires. . . . Why is it that while a bootmaker wants bread, a tailor boots, and a baker clothes, all three, instead of supplying each other's wants, are compelled to want in enforced idleness?"

His answer consists in attacking the socialist (Marxian) solution and ardently supporting the single tax. This is presented in five parts. (1) "An analysis of socialism," dealing with the "economic conceptions," the "industrial" "ethical," "distributive," and the "political" proposals of socialism; (2) "Economics," a criticism of the Marxian theory of value and surplus value; (3) "Ethics," an ethical criticism of socialism and the presentation of a conception of "natural rights" as the foundation for a later treatment of the single tax doctrine; (4) "The outcome of socialism," indicating the political, industrial, social, and ethical results of a socialist regime; (5) "The single tax," an exposition of the ideas of Henry George and a consideration of his leading critics.

Judged in terms of the time of its publication, it is a significant work. It was written while Hirsch was conducting a campaign for the single tax in Australia, and was an important factor in the subsequent growth and influence of the movement there. His treatment of the single-tax doctrine is a thoroughly orthodox presentation of the ideas of Henry George. In criticizing the Marxian theory of value and surplus value he drew heavily on the Austrian School, focusing attention upon the weakness of the Marxian analysis in failing to take into account the significance of utility, the nature of capital, and the importance of interest as a cost factor.

JAMES H. SHOEMAKER

MCFADDEN, C. J. *The philosophy of communism.* (New York: Benziger Bros. 1939. Pp. xx, 345. $3.50.)

Dr. McFadden, a devout and learned Catholic with humanitarian sympathies, attempts a comprehensive examination of communism, focusing his discussion on the problems of nature, mind, history, the state, religion, morality, revolution, and society, as treated in the writings of Marx, Engels, Lenin, and lesser lights. Each of these topics occupies two chapters, one of exposition, in the first half of the book, and one of criticism, in the second half. The discussion is predominantly sociological in character and not philosophical in the technical sense.

The exposition of the communist doctrines presents a well-knit, competent summary marked by scholarly detachment and good judgment. The main defect lies in the complete omission of Marxian economics. The absence of the theories of value, accumulation, crises and imperialism leaves a hole in the picture.

The critical part is informed with the same erudition, clarity of expression and attempt at thoroughness, but is uneven in quality. The approach to the communist ideas of nature, mind and free will is frankly from the angle

of scholastic philosophy, and Thomas Aquinas is the final authority. The statement that to Marx every social institution is essentially materialistic and that for the Marxist "even to admit the existence of ideal forces, such as religion and codes of morality . . . is to contradict the basic principles of his own theory" (p. 236) is not well founded. On another page we find an equally questionable assertion that in the Marxian view music, art, literature and education are "invariably" based on religion and morality (p. 95). There is strong reason to doubt the opinion that had the Aquinas philosophy of nature and mind been more potent in Germany in the first half of the nineteenth century, Marx would "perhaps" never have become a communist (p. 219). The author himself observes, later (p. 229), that there is no necessary connection between Marx's philosophy of nature and mind and his philosophy of history. The reference to surplus-value (p. 270) shows a misunderstanding of this basic concept: the author sees in communism the notion that the entire proceeds from the sale of an article belong to the workers engaged in the last stage of its production, while all the workers who participated in previous stages or in making the capital used up are not entitled to compensation. Finally, assent can hardly be given to the proposition that Marx's attack on surplus-value as unpaid labor constitutes a "superb defense" of private property, so that "logically," instead of condemning the state for defending property, he should "praise it" (pp. 269, 271).

However, these remarks should not obscure the opinion that this is a serious work, not to be classed with the run-of-the mine product of anti-communist literature. It offers a very good account of the communist organon, and the extended critique contains many cogent arguments and interesting observations.

M. M. BOBER

PETTENGILL, S. B. *Smoke-screen.* (Kingsport, Tenn.: Southern Pubs. 1940. Pp. 121.)

A criticism of the "menacing trend toward national socialism in the United States."

Fabian Society: 57th annual report, for the year ending 31 March, 1940. (London: Fabian Soc. 1940. Pp. 19.)

Statistics and Its Methods

Business Cycles in the United States of America, 1919-1932. By J. TINBERGEN. Vol. II. (Geneva: League of Nations. New York: Columbia Univ. Press. 1939. Pp. 244. $1.25.)

Professor Tinbergen's monograph aims at a complete quantitative analysis of cyclical fluctuations, sufficiently precise for testing theories of the business cycle and evaluating public policies. His procedure is first to determine the statistical relationships among important economic variables, and then to coördinate these relationships into a system.

Statistical relationships among 70 variables are determined from annual data for 1919-32, principally by multiple regression analysis. In all, Tinbergen derives some 50 equations. A few examples will serve to indicate their nature. The output of durable producers' goods is expressed as a

function of corporation profits, yield on stocks, price of investment goods, cost of living, wage rate, and a time trend, all the independent variables except time being lagged a half year. The price of investment goods is "explained" in terms of the wage rate and the volume of producers' durable goods, lagged slightly less than a half year; stock prices, in terms of dividends expressed as a percentage of capital, bond yields, the rate of change in stock prices, and a time trend. The equations connecting the variables are all linear, that is, the dependent variable is expressed as a weighted sum of the independent variables.

The statistical equations are fitted into a dynamic "model" of a cyclical process—an analogue of the Walrasian equations of general equilibrium that contains variables referring to different periods of time. A familiar but greatly simplified example of such a model is the cobweb theorem. Assume that the output of a product must be planned a year in advance, that the price of the product in a given year is determined by its output in that year, and its output by the price in the preceding year. An exceptionally large output in one year will then lead to a low price in that year; this in turn to a low output and a high price the following year; this in turn to a high output and a low price the third year; and so on *ad infinitum*. The introduction of lagged variables, as in this example, enables a single external disturbance to produce cyclical fluctuations even if no additional disturbances occur. The equations comprising the mathematical model summarize the structure of the economic system which produces these "endogenous" cyclical movements.

Any one equation relates a single variable to a number of others, the direct influence of which can thus be determined. Additional equations in the model in turn express these variables in terms of still others, allowing indirect influences to be traced. Once a "complete system" containing as many equations as there are variables is obtained, it is possible to solve for any particular variable and thus determine the total effect of both direct and indirect influences. Since the equations contain the value of the selected variable for different time periods, the solution will be in the form of a "final" equation relating the value of the selected variable at a given time to its value at earlier times. From the nature of the equation and the values of the parameters, it is possible to determine the character of the cycles in the selected variable: their period, amplitude, whether they are "explosive" or "damped," *i.e.*, whether the cycles increase or decrease in amplitude, and so on.

Tinbergen's "model" for the United States is not, strictly speaking, a "complete system" since it contains more variables than equations. These additional variables are considered "external," subject to influences outside the economic system. They are the statistical counterparts of the "disturbances" which the economic system converts into cyclical movements. The

one "final" equation Tinbergen derives is expressed in terms of the "net income of corporations," one of the group of variables he considers strategic; it includes as external variables the stock of dwelling houses, the agricultural supply available for the United States market, the gold stock, and a number of other similar items.

From his final equation, Tinbergen concludes that in the absence of a stock exchange boom and hoarding the endogenous movement of corporate income consists chiefly of a sharply damped cycle with a period of 4.8 years. A stock exchange boom introduces the possibility of explosive movements. Hoarding tends to shorten the cycle and to lessen the degree to which it is damped. Tinbergen also utilizes the final equation to test the effects of different policies on the period and degree of damping of business cycles. He concludes with a brief commentary on the validity of some business cycle theories in the light of his statistical analysis.

Tinbergen's results cannot be judged by ordinary tests of statistical significance. The reason is that the variables with which he winds up, the particular series measuring these variables, the leads and lags, and various other aspects of the equations besides the particular values of the parameters (which alone can be tested by the usual statistical technique) have been selected after an extensive process of trial and error *because* they yield high coefficients of correlation. Tinbergen is seldom satisfied with a correlation coefficient less than .98. But these attractive correlation coefficients create no presumption that the relationships they describe will hold in the future. The multiple regression equations which yield them are simply tautological reformulations of *selected* economic data. Taken at face value, Tinbergen's work "explains" the errors in his data no less than their real movements; for although many of the series employed in the study would be accorded, even by their compilers, a margin of error in excess of 5 per cent, Tinbergen's equations "explain" well over 95 per cent of the observed variation.

As W. C. Mitchell put it some years ago, "a competent statistician, with sufficient clerical assistance and time at his command, can take almost any pair of time series for a given period and work them into forms which will yield coefficients of correlation exceeding $\pm .9$. . . . So work of [this] sort . . . must be judged, not by the coefficients of correlation obtained within the periods for which they have manipulated the data, but by the coefficients which they get in earlier or later periods to which their formulas may be applied." (*Business Cycles, the Problem and Its Setting*, pp. 266-7.) But Tinbergen makes no attempt to determine whether his equations agree with data other than those which they translate. The following table presents the results of a modest experiment of this sort. It gives the actual net income of corporations for 1932-37, and the estimated net income obtained from Tinbergen's "final" equation (equation 266 of appendix

Table V), adjusted to make the estimated value equal the actual in 1932. The degree of agreement is not impressive, and would be exceeded by chance in more than 10 per cent of random samples (the correlation coefficient is .68). However, this test covers too brief a period to be conclusive. Moreover, Tinbergen's equation was used to estimate each year separately rather than to trace out the entire cyclical movement; also, the inclusion of terms he omitted in deriving his final equation conceivably might improve matters.

The detailed statistical and mathematical analysis with which the book abounds is characterized by great skill; multiple correlation analysis has rarely been employed so expertly on so large a scale. Nonetheless, even on the technical side at least three operations are open to criticism. First, despite the fact that the results are to be used to judge business cycle theories, the author sometimes chooses among alternative equations that are about equally good on statistical grounds according to their consistency with *a priori* notions concerning the cyclical process (for an extreme example,

NET INCOME OF CORPORATIONS

	1932	1933	1934	1935	1936	1937
Actual	−5.6	−2.5	.1	1.7	4.4	4.4
Estimated	−5.6	−4.5	−1.1	2.5	7.7	−3.4

see p. 148). Second, the use of trend terms is not only highly questionable on statistical grounds, but the verbal explanations of the trends are misleading. An interchange of the explanations would make them appear absurd, but would leave the statistical results unaltered. Third, annual data, which Tinbergen uses throughout, are excessively crude materials for studying business cycles. (For a thorough analysis of this point, see a forthcoming monograph on *Methods of Measuring Cyclical Behavior,* by W. C. Mitchell and A. F. Burns.)

The last three comments are, however, footnotes to the reviewer's main point, which relates to the meaning of Tinbergen's results. The methods used by Tinbergen do not and cannot provide an empirically tested explanation of business cycle movements. His methods are entirely appropriate, however, for deriving tentative hypotheses about the nature of cyclical behavior; and from this viewpoint students of business cycles may find Tinbergen's volume of considerable interest.

MILTON FRIEDMAN

National Bureau of Economic Research

NEW BOOKS

CHURCH, D. E. *Speed methods of statistics for use in business.* (New York: Ronald. 1940. Pp. ix, 97. $3.)

Dearle, N. B. *The labour cost of the World War to Great Britain, 1914-1922: a statistical analysis.* (New Haven: Yale Univ. Press, for Carnegie Endowment for Internat. Peace. 1940. Pp. ix, 260. $2.)

Common-stock indexes. Monog. no. 3. (Bloomington, Ind.: Principia Press. 1940. Pp. 511. $6.)

A progress report on the Minnesota income study as of April 15, 1940. (Minneapolis: WPA, Minn. Resources Comm., U. S. Court House. 1940. Pp. 15, mimeographed.)

PERIODICALS

General Works, Theory and Its History

ANDERSON, M. D. *Employment, investment, and the multiplier.* Econometrica, July, 1940. Pp. 13.

ARRATE, J. P. *Justificatión metodológica de la economía pura.* Rev. de Ciencias Econ., Feb., Mar., 1940. Pp. 22, 12.

BINDER, P. *Investitionsmultiplicator oder Kaufkraftstillegungsquote?* Nord. Tids. for Teknisk. Økon., Apr., 1940. Pp. 20.

BISSELL, R. M., JR. *Price and wage policies and the theory of employment.* Econometrica, July, 1940. Pp. 41.

BLOCH, H-S. *Carl Menger: the founder of the Austrian school.* Jour. Pol. Econ., June, 1940. Pp. 6.

BORDIN, A. *I vincoli al commercio internazionale (L'equilibrio dell'impresa).* Riv. Ital. di Sci. Econ., Apr., 1940. Pp. 24.

BRAMBILLA, F. *Rappresentazione matematica ed interpretazione della curva dei redditi.* Riv. Internaz. di Sci. Soc., Mar., 1940. Pp. 28.

BRONFENBRENNER, M. *Applications of the discontinuous oligopoly demand curve.* Jour. Pol. Econ., June, 1940. Pp. 8.

CLARK, J. M. *John A. Hobson: heretic and pioneer (1858-1940).* Jour. Soc. Philos., July, 1940. Pp. 4.

———. *Toward a concept of workable competition.* Am. Econ. Rev., June, 1940. Pp. 16.

DENIS, H. *Le sens et la portée du principe des coûts comparés.* Rev. d'Econ. Pol., Jan.-Feb., 1940. Pp. 47.

DOBB, M. H. and LERNER, A. P. *"Vulgar economics" and "vulgar Marxism": a reply by M. H. Dobb and a further note by A. P. Lerner.* Jour. Pol. Econ., Apr., 1940. Pp. 10.

ELLSWORTH, P. T. *A comparison of international trade theories.* Am. Econ. Rev., June, 1940. Pp. 5.

FASIANI, M. *Autarchia economica.* Annali di Stat. e di Econ., Anno v, vol. vi, 1939. Pp. 152.

GONNARD, R. *La guerre et les économistes des XVI^e-XVIII^e siècles.* Rev. d'Econ. Pol., Jan.-Feb., 1940. Pp. 12.

v. HAYEK, F. A. *Socialist calculation: the competitive "solution."* Economica, May, 1940. Pp. 25.

HENDERSON, A. M. *A further note on the problem of bilateral monopoly.* Jour. Pol. Econ., Apr., 1940. Pp. 6.

HEWETT, W. W. *The use of economic principles in the teaching of applied subjects.* Am. Econ. Rev., June, 1940. Pp. 6.

HICKS, J. R. *The valuation of the social income.* Economica, May, 1940. Pp. 20.

HORNEDO, E. *La desocupación cronica, vista por Keynes.* El Trimestre Econ., Apr.-June, 1940. Pp. 23.

KOZLIK, A. *Conditions for demand curves whose curves of total revenue, consumers' surplus, total benefit, and compromise benefit are convex.* Econometrica, July, 1940. Pp. 9.

KRISTENSSON, R. *Om planeringens ekonomi.* Nord. Tids. for Teknisk. Økon., Apr., 1940. Pp. 13.

KUZNETS, S. *Schumpeter's business cycles.* Am. Econ. Rev., June, 1940. Pp. 15.

LACHMANN, L. M. *A reconsideration of the Austrian theory of industrial fluctuations.* Economica, May, 1940. Pp. 18.

LAZERE, M. *Welfare economics a misnomer.* Am. Econ. Rev., June, 1940. Pp. 2.

LEONTIEF, W. *The theory of limited and unlimited discrimination.* Quart. Jour. Econ., May, 1940. Pp. 12.

LEVY, M. J., JR. *Note on some Chamberlinian solutions.* Am. Econ. Rev., June, 1940. Pp. 3.

LYNCH, E. S. *A note on Mr. Higgins' "indeterminacy in non-perfect competition"* (with reply by Benjamin Higgins). Am. Econ., Rev., June, 1940. Pp. 4.

MAZZEI, J. *Problemi sulla autarchia e la teoria dei costi comparati.* Riv. Ital. di Sci. Econ., Mar., 1940. Pp. 20.
MCCUTCHEON, D. T. *Vertical mobility in economic status.* Jour. Soc. Philos., July, 1940. Pp. 8.
MITCHELL, B. *Treatment of controversial questions in the teaching of political economy.* Am. Econ. Rev., June, 1940. Pp. 5.
NEISSER, H. *A note on Pareto's theory of production.* Econometrica, July, 1940. Pp. 10.
NIELSEN, B. *Nogle problemer vedrørende budgetkontrollen i indkøbsafdeling og fremstillingsafdeling.* Nord. Tids. for Teknisk. Økon., Apr., 1940. Pp. 17.
NOGARO, B. *"The trade cycle," d'après R. F. Harrod.* Rev. d'Econ. Pol., Jan.-Feb., 1940. Pp. 6.
O'LEARY, J. M. *The teaching of economics in public high schools.* Quart. Jour. Econ., May, 1940. Pp. 17.
PARSONS, T. *An analytical approach to the theory of social stratification.* Am. Jour. Soc., May, 1940. Pp. 22.
————. *The motivation of economic activities.* Canadian Jour. Econ. and Pol. Sci., May, 1940. Pp. 16.
RIST, C. *Célestin Bouglé (1870-1940).* Rev. d'Econ. Pol., Jan.-Feb., 1940. Pp. 3.
ROY, R. *Clement Colson.* Econometrica, July, 1940. Pp. 6.
SETHNE, M. *Vurdering av igangsetsings—og prøvedriftsomkostninger i industriens regnskapsvesen.* Nord. Tids. for Teknisk. Økon., Apr., 1940. Pp. 16.
SHILLAND, P. D. *Problems in the teaching of economics.* Am. Econ. Rev., June, 1940. P. 1.
SMITHIES, A. and SAVAGE, L. J. *A dynamic problem in duopoly.* Econometrica, Apr., 1940. Pp. 14.
STAMMATI, G. *Problemi di finanza corporativa: condizioni di equilibrio dell' organismo tributario.* Riv. di Pol. Econ., Apr., 1940. Pp. 15.
STOLPER, W. F. *The possibility of equilibrium under monopolistic competition.* Quart. Jour. Econ., May, 1940. Pp. 8.
SUMNER, J. D. *A note on cyclical changes in demand elasticity.* Am. Econ. Rev., June, 1940. Pp. 9.
TAYLER, J. B. *The theory of coöperation: a preface to social economy, I.* Yenching Jour. Soc. Stud., Feb., 1940. Pp. 31.
VIANELLI, S. *Le tabelle di consumo in relazione alla dottrina paretiana.* Riv. Ital. di Sci. Comm., Feb., 1940. Pp. 28.
VINCI, F. *I bilanci di famiglia nella prassi e nella teoria economica.* Riv. Ital. di Sci. Comm., Feb., 1940. Pp. 18.
WALD, A. *The approximate determination of indifference surfaces by means of Engel curves.* Econometrica, Apr., 1940. Pp. 32.
WELINDER, C. *Hayek och "Ricardoeffekten."* Ekon. Tids., Mar., 1940. Pp. 7.
ZEUTHEN, F. *Nogle bidrag til teorien om de store virksomheders priser.* Nord. Tids. for Teknisk. Økon., Apr., 1940. Pp. 9.

Economic History and Geography

BEVERIDGE, W. *The trade cycle in Britain before 1850.* Oxford Econ. Papers, Feb., 1940. Pp. 26.
CAPODAGLIO, G. *Storia di un investimento di capitale: La Compagnie Universelle du Canal Maritime de Suez (1859-1938).* Riv. di Storia Econ., Mar., 1940. Pp. 21.
CH'EN, G. *Early history of China's external debts.* Yenching Jour. Soc. Stud., Feb., 1940. Pp. 24.
CLARK, S. D. *Economic expansion and the moral order.* Canadian Jour. Econ. and Pol. Sci., May, 1940. Pp. 23.
GAYER, A. D., JACOBSON, A. and FINKELSTEIN, I. *British share prices, 1811-1850.* Rev. Econ. Stat., May, 1940. Pp. 16.
GRAS, N. S. B. *Secular trends in business.* Quart. Rev. Comm., Spring, 1940.
HECKSCHER, E. F. *Den svenska järnhanteringens ekonomiska historia i fågelperspektiv.*

Ekon. Tids., Mar., 1940. Pp. 15.

HORIE, Y. *The development of the domestic market in the early years of Meiji.* Kyoto Univ. Econ. Rev., Jan., 1940. Pp. 15.

HOWER, R. M. *Captain Macy.* Harvard Bus. Rev., Summer, 1940. Pp. 16.

HOZUMI, F. *Ssu-ma Chien's economic outlook.* Kyoto Univ. Econ Rev., Jan., 1940. Pp. 14.

LANE, F. C. *The Mediterranean spice trade.* Am. Hist. Rev., Apr., 1940. Pp. 10.

MAUPAS, J. *L'expansion du III^e^ Reich.* Sciences Pol., Feb., 1940. Pp. 28.

MCKAY, R. H. *Foreign economic conditions.* Conf. Bd. Econ. Record, June 24, 1940. Pp. 3.

ROBERTI, M. *Il primo tentativo per l'istituzione di una "banca generale italiana" (1802-04).* Riv. Internaz. di Sci. Soc., Mar., 1940. Pp. 21.

ROSTOW, W. W. *Explanations of "The Great Depression" (1873-1896): an historian's view of modern monetary theory.* Econ. Hist., Feb., 1940.

SMITH, R. S. *Spanish antimercantilism of the seventeenth century: Alberto Struzzi and Diego José Dormer.* Jour. Pol. Econ., June, 1940. Pp. 11.

WHITE, L., JR. *Technology and invention in the Middle Ages.* Speculum, Apr., 1940. Pp. 19.

WILSON, J. H. *Industrial activity in the eighteenth century.* Economica, May, 1940. Pp. 11.

Graphical survey of economic developments. Rev. Econ. Stat., May, 1940. Pp. 4.

National balance sheets and operating statements 1936-1937, II. Conf. Bd. Econ. Record, May 22, 1940. Pp. 4.

Agriculture, Mining, Forestry, and Fisheries

"AKANTHOS." *Germany's mineral oil supplies in time of war.* Bankers' Insur. Manag. and Agents' Mag., Apr., 1940. Pp. 8.

BIDWELL, P. W. *The battle of the metals.* Foreign Affairs, July, 1940. Pp. 16.

BLACK, J. D. and BODDY, N. *The agricultural situation, March, 1940.* Rev. Econ. Stat., May, 1940. Pp. 21.

CASSELS, J. M. *Consumer interests in national resources.* Social Educ., May, 1940. Pp. 5.

CRAWFORD, J. G. and LANGE, G. *County planning for land-use adjustment.* Jour. Farm Econ., May, 1940. Pp. 11.

DAVIS, J. S. *A desirable foreign trade policy for American agriculture.* Jour. Farm Econ., May, 1940. Pp. 10.

EVELPIDIS, C. *L'agriculture dans le cadre de l'économie de guerre.* Rev. des Sci. Econ. et Finan., Jan.-Mar., 1940. Pp. 18.

FARLEY, M. S. *Japanese agriculture under war pressure.* Far East. Survey, June 5, 1940. Pp. 5.

FRANKLIN, H. L. *Wartime agricultural and food control in Germany.* Foreign Agric., April., 1940. Pp. 40.

FREY, J. W. *The world's petroleum.* Geograph. Rev., July, 1940. Pp. 12.

FROMONT, P. *Consequences of motorization in farming.* Internat. Rev. Agric., part E, Feb., 1940.

HAZEN, N. W. *Turkish agriculture—changing agro-economic policy.* Foreign Agric., Apr., 1940. Pp. 52.

HERZOG, J. S. *La cuestion del petroleo en Mexico.* El Trimestre Econ., Apr.-June, 1940. Pp. 74.

HSIANG, C-Y. *Land utilization in China: a critique of methodology.* Jour. Land and Pub. Util. Econ., May, 1940. Pp. 4.

HUBBARD, D. A. *Japan and Latin America's resources.* Far East. Survey, May 8, 1940. Pp. 7.

HUBER, J. R. *The effects of German clearing agreements and import restrictions on cotton, 1934-1939.* So. Econ. Jour., Apr., 1940. Pp. 21.

HURLBURT, V. *Rural zoning for Missouri?* Jour. Land and Pub. Util. Econ., May, 1940. Pp. 7.

IBACH, D. B. *Rôle of soil depletion in land valuation.* Jour. Farm Econ., May, 1940. Pp. 13.

LADEJINSKY, W. *Japan's food self-sufficiency.* Foreign Agric., June, 1940. Pp. 22.

LANDIS, W. S. *Man's greatest achievement: the science and art of agriculture.* Vital Speeches, May 15, 1940. Pp. 4.
LIAO, T-C. *School land: a problem of educational finance.* Yenching Jour. Soc. Stud., Feb., 1940. Pp. 12.
DE LA PEÑA, M. T. *El credito agricola en la economia mexicana.* El Trimestre Econ., Apr.-June, 1940. Pp. 20.
PORTER, C. *Philippines neglects fisheries resources.* Far East. Survey, June 19, 1940. Pp. 2.
RENNE, R. R. *On agricultural policy.* Jour. Farm Econ., May, 1940. Pp. 8.
RUTHERFORD, R. S. G. *The consumption and rationing of butter and margarine.* Oxford Econ. Papers, Feb., 1940. Pp. 13.
SAUNDERSON, M. H. *Some economic aspects of western range-land conservation.* Jour. Land and Pub. Util. Econ., May, 1940. Pp. 5.
SCHULTZ, T. W. *Capital rationing, uncertainty, and farm-tenancy reform.* Jour. Pol. Econ., June, 1940. Pp. 16.
STEWART, J. R. *The yen bloc supply base in practice.* Far East. Survey, May 22, 1940. Pp. 7.
T., R. J. *Note on the agricultural position in England and Wales, as compared with the beginning of the war in 1914.* Jour. Royal Stat. Soc., part i, 1940. Pp. 2.
TAYLOR, C. C. *Canada's wartime agricultural measures.* Foreign Agric., June, 1940. Pp. 22.
TAYLOR, H. C., WAUGH, F. V. and SAVILLE, R. J. *Training and recruitment of agricultural economic personnel. I. A general view. II. The civil servant. III. The South.* Jour. Farm Econ., May, 1940. Pp. 10.
YAGI, Y. *The planning of agricultural production in wartime.* Kyoto Univ. Econ. Rev., Jan., 1940. Pp. 15.
YATES, P. L. *The waste lands of Britain: a reply.* Fabian Quart., Spring, 1940. Pp. 5.
Agricultural production and proceeds. Weekly Report, German Inst. for Bus. Res., May 22, 1940. Pp. 4.
Coal liquefaction and the South Manchuria Railway Company. Contemp. Manchuria, Jan., 1940. Pp. 10.
Rubber—current status of a strategic commodity. Index, N.Y. Trust Co., Summer, 1940. Pp. 8.

Manufacturing Industries

CUNLIFFE, G. S. *Canada's steel strength.* Canadian Banker, Apr., 1940. Pp. 14.
DERKSEN, J. B. D. *Long cycles in residential building: an explanation.* Econometrica, Apr., 1940. Pp. 10.
DI FENIZIO, F. *La reazione chimica come strumento di produzione.* Giorn. d. Econ., Jan.-Feb., 1940. Pp. 12.
HICKS, W. T. *Recent expansion in the southern pulp and paper industry.* So. Econ. Jour., Apr., 1940. Pp. 9.
MCDIARMID, O. J. *Some aspects of the Canadian automobile industry.* Canadian Jour. Econ. and Pol. Sci., May, 1940. Pp. 17.
PUTNAM, R. L. *The case for packaging machinery.* Modern Packaging, June, 1940.
Standard Oil Company of New Jersey (a second article). Fortune, May, 1940.

Transportation and Communication

ASHTON, H. *Railroad costs in relation to the volume of traffic.* Am. Econ. Rev., June, 1940. Pp. 9.
BARTON, F. L. *Recent developments concerning the South's freight-rate problem.* So. Econ. Jour., Apr., 1940. Pp. 18.
BLOCH, K. *Scandinavian war cuts deep into Far Eastern shipping.* Far East. Survey, May 8, 1940. Pp. 2.
BORG, D. *War speeds up expansion of telecommunications in China.* Far East. Survey,

Apr. 24, 1940. Pp. 2.

BORRIELLO, B. *La marina mercantile nell'attuale conflitto.* Riv. di Pol. Econ., Apr., 1940. Pp. 4.

CHALKIOPOULOS, G. *La répercussion de la guerre sur la marine marchande.* Rev. des Sci. Econ. et Finan., Jan.-Mar., 1940. Pp. 16.

DOUGALL, H. E. and FARWELL, L. C. *A review of railroad financing, 1920-1938. I. Volume and cost of railroad capital.* Jour. Land and Pub. Util. Econ., May, 1940. Pp. 7.

GOFF, J. H. *The interterritorial freight-rate problem and the South.* So. Econ. Jour., Apr., 1940. Pp. 12.

HAAS, R. *Die Abhängigkeit des deutschen Eisenbahnnetzes von seiner geschichtlichen Entwicklung.* Archiv f. Eisenbahnw., May-June, 1940. Pp. 60.

LYNCH, E. S. *Railroad taxation and abandonments.* Harvard Bus. Rev., Summer, 1940. Pp. 8.

MACMAHON, A. W. and DITTMAR, W. R. *Autonomous public enterprise—the German railways.* III. Pol. Sci. Quart., June, 1940. Pp. 23.

ODELL, L. H. *Japanese state railways set new records.* Far East. Survey, Apr. 24, 1940. Pp. 3.

PELLEY, J. J. *American transportation.* Vital Speeches, Apr. 15, 1940. Pp. 2.

WARNER, E. P. *Aviation in 1940.* Yale Rev., Summer, 1940. Pp. 24.

WERNEKKE. *Schiffahrt, Hafen- und Kanalbetriebe der englischen Eisenbahnen.* Archiv f. Eisenbahnw., May-June, 1940. Pp. 16.

Railroads. Building America, Mar., 1940.

Trade, Commerce, and Commercial Crises

BECKETT, G. *The problem of reclassification in the reciprocal trade agreements.* Jour. Pol. Econ., Apr., 1940. Pp. 11.

BOWEN, I. *Building output and the trade cycle (U.K. 1924-38).* Oxford Econ. Papers, Feb., 1940. Pp. 21.

CARSOW, M. *L'arrêt des exportations allemandes.* Jour. des Econ., Jan.-Feb., 1940. Pp. 8.

D'ANNA, F. C. *Sane relazioni commerciali internazionali.* Riv. di Pol. Econ., Mar., 1940. Pp. 7.

EDMINSTER, L. R. *The American republic and the trade agreement program.* U. S. Dept. of State Bull., Mar. 2, 1940.

GLASS, L. S. *Displacement of German trade with Brazil.* Comm. Intell. Jour., Mar. 16, 1940.

HANSEN, H. E. *Current business conditions.* Conf. Bd. Econ. Record, May 22, 1940. Pp. 5.

KING, W. T. C. *An export problem for wartime.* Banker (London), May, 1940.

LI, C-M. *China's international trade: wartime developments.* Nankai Soc. and Econ. Quart., Jan., 1940. Pp. 62.

LITMAN, S. *The trade agreements program of the United States.* Opinion and Comment, May 7, 1940. Pp. 11.

LLOYD, J. *Foreign trade in the grip of war.* Mag. of Wall Street, June 1, 1940.

MCKAY, R. H. *Foreign economic conditions.* Conf. Bd. Econ. Record, May 22, 1940. Pp. 2.

REIMANN, G. *Problems and political implications of the finance of German-Russian trade.* Annalist, May 30, 1940.

SCHLEICHER, G. P. *Equality of treatment in international trade as a political and economic policy.* Southwest. Soc. Quart. Jour., Mar., 1940.

STEVENS, R. B. *The European war and our foreign trade.* Vital Speeches, May 15, 1940. Pp. 2.

THOMSEN, F. L. *Export dumping plans.* Jour. Farm Econ., May, 1940. Pp. 14.

DE VEGH, I. *How allied policies affect our trade.* Barron's, Apr. 22, 1940.

WILK, K. *International organization and the International Chamber of Commerce.* Pol. Sci. Quart., June, 1940. Pp. 18.

America's trade dilemma. Statist, Mar. 23, 1940.

Comparative figures for China's value of trade with Japan in 1939. Chinese Econ. and Stat. Rev., Mar., 1940. P. 1.

A policy of strict economic and military isolation for the United States. Debaters' Digest, Feb., 1940.

Value and volume of principal exports and imports between United States and chief foreign markets. Our World Trade, Jan.-Mar., 1940. Pp. 18.

Accounting, Business Methods, Investments, and the Exchanges

BELL, W. H. *Recent pronouncements of the Securities and Exchange Commission on accounting subjects.* Jour. Accountancy, June, 1940. Pp. 8.

BELVILLE, H. M., JR. *The ABCD's of radio audiences.* Pub. Opinion Quart., June, 1940. Pp. 12.

BRODIE, H. *Odd-lot trading on the New York Stock Exchange and financial decentralization.* So. Econ. Jour., Apr., 1940. Pp. 10.

BURNHAM, E. A. *The department store in its community.* Harvard Bus. Rev., Summer, 1940. Pp. 17.

CATSIFF, R. *Controlling tool costs.* N.A.C.A. Bull., sec. i, May 15, 1940. Pp. 28.

COLBERT, A. R. *The transition to depreciation accounting.* Jour. Land and Pub. Util. Econ., May, 1940. Pp. 7.

DUNCAN, D. J. *What motivates business buyers.* Harvard Bus. Rev., Summer, 1940. Pp. 7.

EBERSOLE, J. F. *Protecting bank bond investments.* Harvard Bus. Rev., Summer, 1940. Pp. 7.

GLADIUEX, B. L. *Management planning in the federal government.* Advanced Manag., Apr., May, June, 1940. Pp. 9.

GORDON, R. A. *Ownership and compensation as incentives to corporation executives.* Quart. Jour. Econ., May, 1940. Pp. 19.

HANSEN, H. E. *Department store operations, 1928-1939.* Conf. Bd. Econ. Record, May 22, 1940. P. 1.

HASKINS, W. A., JR. and GILMORE, F. F. *A case study in budgetary control.* N.A.C.A. Bull., sec. i, Apr. 15, 1940. Pp. 26.

HOPF, H. A. *Administrative co-ordination.* Advanced Manag., Apr., May, June, 1940. Pp. 7.

HOWARD, S. E. *The Trust Indenture act of 1939.* Jour. Land and Pub. Util. Econ., May, 1940. Pp. 13.

HUGHES, C. F. *Pricing.* Advanced Manag., Apr., May, June, 1940. Pp. 3.

JACOBY, N. H. *The rate of capitalizing railroad earnings to establish a valuation for property taxation.* Jour. Bus. Univ. Chicago, pt. 1, Apr., 1940. Pp. 14.

LITTLE, A. H. *All this—and a premium too.* Dun's Rev., Apr., 1940. Pp. 5.

MARSH, W. P. *Budgeting for the smaller company.* N.A.C.A. Bull., sec. i, June 1, 1940. Pp. 11.

MATHIESON, J. K., et al. *The investment trust bill and accountancy.* Jour. Accountancy, May, 1940. Pp. 6.

MAY, G. O. *The relation of depreciation provisions to replacement.* Jour. Accountancy, May, 1940. Pp. 7.

MILLER, K. E. *Computing seasonal indexes.* N.A.C.A. Bull., sec. i, June 1, 1940. Pp. 12.

MILLER, S. L. *A calculation of exchange values of defaulted railroad bonds in reorganization.* Annalist, Apr. 11, 1940.

———. *Earning power of the petroleum industry shows recovery.* Annalist, May 30, 1940.

MILLS, D. H. *Government bond investment policy.* Bankers Mag., May, 1940. Pp. 3.

NICKERSON, C. B. *The cost element in pricing.* Harvard Bus. Rev., Summer, 1940. Pp. 12.

PATON, W. A. *Last-in, first-out.* Jour. Accountancy, May, 1940. Pp. 7.

PELOUBET, M. E. *Last-in, first-out once more.* Jour. Accountancy, June, 1940. Pp. 5.

PERKINS, J. S. *Management research.* Harvard Bus. Rev., Summer, 1940. Pp. 8.

PFANNER, J. A., JR. *A statistical study of the drawing power of cities for retail trade.* Jour. Bus. Univ. Chicago, part 2, Apr., 1940. Pp. 81.

RECKITT, E. *History of accounting in the State of Illinois.* Jour. Accountancy, May, 1940. Pp. 5.

ROBNETT, R. H. *What makes the budget work.* N.A.C.A. Bull., sec. i, June 1, 1940. Pp. 15.

SILVERSTEIN, N. L. *Some considerations on the management of commercial bank investments.* Jour. Bus. Univ. Chicago, part 1, Apr., 1940. Pp. 10.

SMITH, F. P. *Management-trading and stock-market profits.* Jour. Bus. Univ. Chicago, part 1, Apr., 1940. Pp. 15.

STEMPF, V. H. *Trends in accounting procedure.* Jour. Accountancy, June, 1940. Pp. 9.

SWEEZY, M. Y. *German corporate profits: 1926-1938.* Quart. Jour. Econ., May, 1940. Pp. 15.

TANNENBAUM, R. *Developments affecting cost under the unfair practices acts.* Jour. Bus. Univ. Chicago, pt. i, Apr., 1940. Pp. 18.

TIERNEY, J. L. *"Fair value" and the deficiency judgment.* Jour. Land and Pub. Util. Econ., May, 1940. Pp. 15.

YORK, T. *Nature of "acquired" surplus.* Jour. Accountancy, May, 1940. Pp. 6.

Daily turnover of stocks on Shanghai foreign stock exchange. Chinese Econ. and Stat. Rev., Apr., 1940.

Inventories: a preliminary statement by the research department of the American Institute of Accountants. Jour. Accountancy, June, 1940. Pp. 2.

The profits of leading corporations, 1938-39. Mo. Bank Letter, Nat. City Bank, New York, Apr., 1940.

Survey of business trends—1939 sales and inventories. Dun's Rev., May, 1940. Pp. 12.

Capital and Capitalistic Organization

BIGHAM, T. C. *Comment on the Pacific Gas and Electric case.* Am. Econ. Rev., June, 1940. Pp. 2.

FAINSOD, M. *Regulation and efficiency.* Yale Law Jour., May, 1940. Pp. 21.

JULIAN, J. *The war and a small business.* Fabian Quart., Spring, 1940. Pp. 4.

MALLISON, J. W. *Britain's economic war set-up.* Canadian Banker, Apr., 1940. Pp. 8.

MAY, G. O. *Valuation or historical cost: some recent developments.* Dun's Rev., May, 1940. Pp. 6.

MAYER, R. W. *Supreme Court's attitude toward historical cost.* Am. Econ. Rev., June, 1940. Pp. 2.

PITIGLIANI, F. R. *The development of Italian cartels under fascism.* Jour. Pol. Econ., June, 1940. Pp. 26.

REED, H. L. *Economists on industrial stagnation.* Jour. Pol. Econ., Apr., 1940. Pp. 7.

SMITH, N. L. *Rail and utility investments under expanding public control.* Harvard Bus. Rev., Summer, 1940. Pp. 13.

SPARLIN, E. E. *Public ownership versus state purchasing: the case of printing.* Jour. Pol. Econ., Apr., 1940. Pp. 11.

TIMASHEFF, N. S. *Business and the professions in liberal, fascist and communist society.* Am. Jour. Soc., May, 1940. Pp. 7.

Labor and Labor Organizations

ANDREWS, E. F. *What amendments to the wage and hour law?* Dun's Rev., Apr., 1940. Pp. 5.

BAKER, J. *The profit in a union contract.* Advanced Manag., Apr., May, June, 1940. Pp. 6.

BOLES, W. E., JR. *Some aspects of the Fair Labor Standards act.* So. Econ. Jour., Apr., 1940. Pp. 14.

DANIEL, G. H. *Some factors affecting the movement of labour.* Oxford Econ. Papers, Feb., 1940. Pp. 36.

DAYKIN, W. L. *The worker's right to a job.* Am. Fed., June, 1940. Pp. 7.

FARLEY, M. S. *Spurt in Japan's living costs bears heavily on labor.* Far East. Survey, May 22, 1940. P. 1.

FISHER, W. E. *Union wage and hour policies and employment.* Am. Econ. Rev., June, 1940. Pp. 10.

HALLECK, C. A. *Urgent labor amendments.* Vital Speeches, May 15, 1940. Pp. 4.

HANNAH, H. W. *Agricultural labor and the Fair Labor Standards act of 1938.* Jour. Farm Econ., May, 1940. Pp. 9.

HARTMAN, P. *Negro longshoremen make gains.* Am. Fed., June, 1940. Pp. 2.

HEDGES, M. H. *Time and motion study under collective bargaining.* Advanced Manag., Apr., May, June, 1940. Pp. 4.

HOLMES, W. *British labor in war time.* Am. Fed., Apr., 1940. Pp. 3.

HUMPHREY, D. D. *Alleged "additional workers" in the measurement of unemployment.* Jour. Pol. Econ., June, 1940. Pp. 8.

KELLEY, W. J. *Trade unions and credit unions: their relationship.* Am. Fed., May, 1940. Pp. 2.

LIWCHEN, R. *Niveau de vie des ouvriers allemands en 1927 et en 1937.* Rev. d'Econ Pol., Jan.-Feb., 1940. Pp. 10.

LOGAN, H. A. *Wage policy and the cost of living in war and peace.* Quart. Rev. Comm., Spring, 1940.

MEYERS, F. *The Knights of Labor in the South.* So. Econ. Jour., Apr., 1940. Pp. 9.

MILLER, S., JR. *Labor coöperation in accident prevention.* Am. Fed., June, 1940. Pp. 11.

MITCHELL, J. G. *Fundamental principles involved in bill to amend the National Labor Relations act.* Annalist, Apr. 4, 1940.

MOEDTS, Y. *Le problème de la rémunération du travail ouvrier: les principaux systèmes de salaire.* Annales des Sci. Comm. et Econ., 4e Année, no. 2, 1940. Pp. 20.

MURRAY, P. *Labor and responsibility.* Va. Quart. Rev., Spring, 1940.

NEEDHAM, D. J. *Twenty answers on wages and hours.* Banking, June, 1940. Pp. 2.

ODD, O. *How collective bargaining works in Sweden.* Am. Fed., May, 1940. Pp. 3.

PARRISH, J. B. *Women in the nation's labor market.* Quart. Jour. Econ., May, 1940. Pp. 8.

PATTERSON, W. F. *Apprenticeship—a necessary investment for the future.* Dun's Rev., June, 1940. Pp. 4.

PETERSON, F. *Collective bargaining in the United States of America.* Internat. Lab. Rev., May, 1940. Pp. 27.

PORTER, C. *Philippine labor policy in the making.* Far East. Survey, Apr. 10, 1940. Pp. 6.

ROSS, A. M. *The negro worker in the depression.* Social Forces, May, 1940. Pp. 10.

ROSS, O. W. *Industrial homework.* Am. Fed., May, 1940. Pp. 10.

SMITH, R. A. and DELANCEY, W. J. *The state legislatures and unionism.* Michigan Law Rev., May, 1940. Pp. 45.

STAEHLE, H. *Employment in relation to technical progress.* Rev. Econ. Stat., May, 1940. Pp. 7.

THORNDIKE, E. L. *The variation in wage-ratios.* Quart. Jour. Econ., May, 1940. Pp. 15.

UNDERHILL, H. F. *Recent Canadian labor relations legislation.* Jour. Pol. Econ., June, 1940. Pp. 16.

UPTON, C. D., MILLER, L. and ERICKSON, J. E. *Minnesota state employees train for unionism.* Am. Fed., May, 1940. Pp. 6.

WARD, C. *Mechanics of collective bargaining.* Harvard Law Rev., Mar., 1940.

WEIGERT, O. *Administration of labor law.* Am. Fed., June, 1940. Pp. 5.

WHELPTON, P. K. and HOLLANDER, E. *A standard occupational and industrial classification of workers.* Social Forces, May, 1940. Pp. 7.

WILSON, F. *More data on nation's labor force to be obtained in 1940.* Am. Fed., Apr., 1940. Pp. 6.

WILSON, T. A. *Labor looks at guidance.* Am. Fed., May, 1940. Pp. 6.

WOLMAN, L. *The turning point in American labor policy.* Pol. Sci. Quart., June, 1940. Pp. 15.

YODER, D. *Economic changes and industrial unrest in the United States.* Jour. Pol. Econ., Apr., 1940. Pp. 16.

ZOLOTAS, X. *Problèmes du travail et du capital en periode de guerre.* Rev. des Sci. Econ. et Finan., Jan.-Mar., 1940. Pp. 28.

Collective bargaining by the American Newspaper Guild. Mo. Lab. Rev., Apr., 1940. Pp. 18.

A comparison of the gainfully occupied population by sex and age in the various countries of the world. Internat. Lab. Rev., May, 1940. Pp. 10.

Employment and unemployment in Great Britain and the United States. Lab. Gazette, May, 1940. Pp. 2.

The employment and unemployment of young workers. Internat. Lab. Rev., May, 1940. Pp. 34.

Employment, unemployment, and hours of work. Internat. Lab. Rev., June, 1940. Pp. 11.

Hours of employment of women and young persons in factories in Great Britain. Internat. Lab. Rev., June, 1940. Pp. 6.

Housing facilities and expenditures of wage earners and clerical workers. Mo. Lab. Rev., Apr., 1940. Pp. 18.

An international survey of recent family living studies. III. *Families of unemployed workers.* Internat. Lab. Rev., June, 1940. Pp. 18.

New techniques for getting jobs. Mo. Lab. Rev., Apr., 1940. Pp. 10.

Regulation of employment in Germany. Internat. Lab. Rev., Apr., 1940. Pp. 11.

Requisitioning of labour. Internat. Lab. Rev., June, 1940. Pp. 26.

Southern Labor Conference. Am. Fed., Apr., 1940. Pp. 6.

Strikes in 1939. Mo. Lab. Rev., May, 1940. Pp. 27.

United States Supreme Court voids anti-picketing laws. Am. Fed., June, 1940. Pp. 6.

Wages. Internat. Lab. Rev., May, 1940. Pp. 12.

Wages and normal hours of work of adult males in certain occupations in various countries in October, 1939. Internat. Lab. Rev., Apr., 1940. Pp. 24.

Money, Prices, Credit, and Banking

AGGER, E. E. *Strategy on the gold front.* Banking, June, 1940. Pp. 2.

ANDREWS, P. W. S. *A further inquiry into the effects of rates of interest.* Oxford Econ. Papers, Feb., 1940. Pp. 42.

ATWOOD, A. W. *The threat of socialized credit.* Banking, May, 1940. Pp. 4.

AYRES, L. P. *The future of bond prices.* Bankers Mag., June, 1940. Pp. 2.

BACKMAN, J. *The causes of price inflexibility.* Quart. Jour. Econ., May, 1940. Pp. 15.

BAUDHUIN, F. *Equilibre monétaire, banque et capitaux.* Bull. de l'Inst. de Recherches Econ., Feb., 1940. Pp. 14.

BERNSTEIN, E. M. *Exchange rates under the gold standard.* Jour. Pol. Econ., June, 1940. Pp. 9.

BLOCH, K. *Chinese and Japanese currencies linked in fall.* Far East. Survey, Apr. 10, 1940. Pp. 3.

BROWN, H. G. *Objections to the 100 per cent reserve plan.* Am. Econ. Rev., June, 1940. Pp. 6.

CADMAN, P. F. *Prospecting for a gold solution.* Banking, June, 1940. P. 1.

CHENG, L-C. *Commodity prices in North China since 1937.* Yenching Jour. Soc. Stud., Feb., 1940. Pp. 35.

CLARKE, E. L. *Too much gold.* New World, Apr., 1940. P. 1.

COPELAND, M. T. *Price trends of industrial chemicals.* Harvard Bus. Rev., Summer, 1940. Pp. 11.

———. *Raw commodity prices in war time and in peace.* Bull. Harvard Bus. School Alumni Assoc., May, 1940. Pp. 6.

DACEY, W. M. *Commodity control in wartime and the free sterling blunder.* Banker (London), May, 1940.

GAINSBRUGH, M. R. *Total individual savings, liquid and investment, 1900-1939.* Conf. Bd. Econ. Record, Apr. 22, 1940. Pp. 5.

GEORGE, E. B. *Price control by government.* Dun's Rev., June, 1940. Pp. 11.

HAENSEL, P. *The future of American gold.* Bankers Mag., May, 1940. Pp. 3.
HALL, W. B. *Installment loan policies and procedure.* Bankers Mag., May, 1940. Pp. 4.
HANSEN, A. H. *Gold in a warring world.* Yale Rev., Summer, 1940. Pp. 19.
HERSEY, A. *Historical review of the objectives of federal reserve policy.* Fed. Res. Bull. Apr., 1940. Pp. 11.
HORSEFIELD, J. K. *The bank and its treasure.* Economica, May, 1940. Pp. 18.
HUSBAND, W. H. *Interest rates for home financing.* Am. Econ. Rev., June, 1940. Pp. 13.
ISAACS, N. *Price control by law.* Harvard Bus. Rev., Summer, 1940. Pp. 6.
JACK, L. B. *The gold problem.* Canadian Banker, Apr., 1940. Pp. 8.
JONES, H. *An appraisal of the rules and procedures of bank supervision, 1929-39.* Jour. Pol. Econ., Apr., 1940. Pp. 16.
JONES, J. H. *The rate of interest.* Accountant (London), Mar. 23, 1940.
KAZAKEVICH, V. D. *The war and American finance.* Sci. and Soc., Spring, 1940.
KNOX, F. A. *Canadian war finance and the balance of payments, 1914-18.* Canadian Jour. Econ. and Pol. Sci., May, 1940. Pp. 32.
LEHMANN, F. *The gold problem.* Soc. Research, May, 1940. Pp. 26.
LELAND, J. L. *Interest rates: long-term vs. short-term.* Econometrica, July, 1940. Pp. 7.
LICHTENSTEIN, W. *Recent literature on the gold problem.* Jour. Bus. Univ. Chicago, part 1, Apr., 1940. Pp. 12.
LIN, W. Y. *China's war-time monetary policy: objectives and technique.* Nankai Soc. and Econ. Quart., Jan., 1940. Pp. 60.
LISBONNE, J. *La politique monétaire de l'Uruguay au cours de ces dernières années.* Jour. des Econ., Jan.-Feb., 1940. Pp. 5.
LONGSTREET, V. M. *Investments and liquidity of member banks during 1939.* Fed. Res. Bull., Apr., 1940. Pp. 5.
LORENZ, O. C. *Consumer credit operation costs.* Bankers Mag., May, 1940. Pp. 3.
MORGENTHAU, H., JR. *Gold and the money of the United States.* Bankers Mag., June, 1940. Pp. 3.
MOUSMOUTIS, N. *Le répercussion de l'économie de guerre sur les niveaux des prix.* Rev. des Sci. Econ. et Finan., Jan.-Mar., 1940. Pp. 7.
N. *La Banque de France en 1939.* Jour. des Econ., Jan.-Feb., 1940. Pp. 15.
NEHEMKIS, P. R., JR. *Wanted: new banking system for small business.* Bankers Mag., June, 1940. Pp. 4.
NETHERLAND, W. *Use existing system for small business credit.* Bankers Mag., June, 1940. Pp. 2.
OSBORNE, H. D. *Business savings in relation to business income and assets.* Conf. Bd. Econ. Record, Apr. 22, 1940. Pp. 5.
POPE, B. F. *The future of bank loan demand.* Bankers Mag., May, 1940. Pp. 2.
RICHES, E. J. *Deferred pay: the Keynes plan.* Internat. Lab. Rev., June, 1940. Pp. 25.
SAYERS, R. S. *Business men and the terms of borrowing.* Oxford Econ. Papers, Feb., 1940. Pp. 9.
SCHWENGER, R. B. *Control of agricultural prices in the United Kingdom.* Foreign Agric., June, 1940. Pp. 3.
SIMMONS, E. C. *Treasury deposits and excess reserves.* Jour. Pol. Econ., June, 1940. Pp. 20.
THOMAS, R. G. *100 per cent money—the present status of the 100 per cent plan.* Am. Econ. Rev., June, 1940. Pp. 9.
TISSOT, L. *Finances finlandaises.* Rev. d'Econ. Pol., Jan.-Feb., 1940. Pp. 7.
TOKUNAGA, K. *The progress of monetary unification in the Mêng Chiang Provinces.* Kyoto Univ. Econ. Rev., Jan., 1940. Pp. 15.
TORGERSON, H. W. *Agricultural finance in the United States.* Jour. Land and Pub. Util. Econ., May, 1940. Pp. 10.
WEINTRAUB, S. *Inflation and price control.* Harvard Bus. Rev., Summer, 1940. Pp. 8.
WILSON, F. J. *Know your money.* Bankers Mag., May, 1940. Pp. 3.
WOOLFSON, A. P. *Monetary control of price inflation.* Bankers Mag., June, 1940. Pp. 4.
WORKING, H. *War and commodity prices.* Jour. Am. Stat. Assoc., June, 1940. Pp. 16.

Banks and the cost of living. Bankers' Insur. Manag. and Agents' Mag., Apr., 1940. Pp. 3.
The course of the index figures of import and export prices in the Netherlands Indies, 1929-August, 1939. Netherlands Indies, Dec., 1939. Pp. 2.
Credit expansion in Germany. Statist, May 11, 1940.
The decline in "free sterling." Mo. Bank Letter Nat. City Bank, New York, Apr., 1940.
The federal reserve system and its buildings. Canadian Banker, Apr., 1940. Pp. 5.
Free and controlled pounds. Economist (London), Apr. 6, 1940.
The future of the private banks. Economist (London), Apr. 6, 1940.
The gold problem. Mo. Bank Letter Nat. City Bank, New York, June, 1940.
Mr. Keynes's compulsory savings plan. Canadian Banker, Apr., 1940. Pp. 4.
Member bank operating ratios, 1939. Fed. Res. Bull., June, 1940. Pp. 3.
The progress of banking in Great Britain and Ireland during 1939. Bankers' Insur. Manag. and Agents' Mag., June, 1940. Pp. 14.
Retail prices in certain countries in October, 1939. Internat. Lab. Rev., Apr., 1940. Pp. 6.
The uses of bank credit. Bull. Canterbury Chamber of Comm., Apr., 1940. Pp. 4.
War changes in commodity prices. Conf. Bd. Econ. Record, June 24, 1940. Pp. 5.

Public Finance, Taxation, and Tariff

ALVORD, E. C. *Analysis of the revenue act of 1939.* Taxes, June, 1940.
ANDERSON, W. editor. *Philadelphia's earned income tax.* Am. Pol. Sci. Rev., Apr., 1940. Pp. 6.
ANGÉLOPOULOS, A. *Problèmes du financement de la guerre.* Rev. des Sci. Econ. et Finan., Jan.-Mar., 1940. Pp. 41.
BARTELT, E. F. *Control of federal expenditures.* N.A.C.A. Bull., sec. i, May 1, 1940. Pp. 39.
BIDWELL, P. W. *Professor Litman's review of The Invisible Tariff.* Am. Econ. Rev., June, 1940. P. 1.
BIRD, F. L. *Recent trends in tax delinquency.* Dun's Rev., Apr., 1940. Pp. 7.
BLOCH, H.-S. *The evolution of French taxation—an historical sketch.* Bull. Nat. Tax Assoc., June, 1940. Pp. 7.
BLOUGH, R., et al. *Federal income and estate taxation.* Law and Contemp. Problems, Spring, 1940. Pp. 100.
BRINDLEY, J. E. *Iowa taxation and the public school system.* Bull. Nat. Tax Assoc., Apr., 1940. Pp. 16.
BUEHLER, A. G. *The tax system and tax consciousness.* Bull. Nat. Tax Assoc., May, 1940. Pp. 10.
CADMAN, P. F. *National income and deficit financing.* Am. Bankers Assoc. Jour., 1939. Pp. 44.
CHRÉTIEN, M. *La contribution nationale extraordinaire.* Rev. de Sci. et de Légis. Finan., Jan.-Mar., 1940. Pp. 20.
———. *La limitation des bénéfices de guerre.* Rev. de Sci. et de Légis. Finan., Jan.-Mar., 1940. Pp. 44.
D'ALBERGO, E. *Aspetti della recente riforma fiscale.* Giorn. d. Econ., Jan.-Feb., 1940. Pp. 31.
DUE, J. F. *The incidence of retail sales taxes.* Bull. Nat. Tax Assoc., May, 1940. Pp. 5.
DURHAM, W. A., JR. and ENSLEY, G. W. *Revenue possibilities of the personal income tax.* Bull. Nat. Tax Assoc., May, 1940. Pp. 5.
EDMISTON, H. and ANDERSON, G. *United States government corporations and credit agencies in 1939.* Fed. Res. Bull., Apr., 1940. Pp. 8.
EISNER, M. *Federal taxes for defense.* Vital Speeches, June 15, 1940. Pp. 3.
FALKNER, R. P. *The federal fiscal situation.* Conf. Bd. Econ. Record, May 22, 1940. P. 1.
FASIANI, M. *A proposito di un recente volume sull'incidenza delle imposte.* Giorn. d. Econ., Jan.-Feb., 1940. Pp. 23.
FERGER, W. F. *The measurement of tax shifting: economics and law.* Quart. Jour. Econ., May, 1940. Pp. 26.
GIBSON, A. H. *War finance and its aftermath.* II, III. Bankers' Insur. Manag. and Agents' Mag., Apr., May, 1940. Pp. 12, 16.

HUDSON, P. G. *Homestead tax exemption in 1939.* Bull. Nat. Tax Assoc., Apr., 1940. Pp. 2.
KERR, T. S. *Intergovernmental taxation.* Am. Law School Rev., May, 1940. Pp. 6.
KOONTZ, H. D. *Increased gas rates based upon higher taxes.* Jour. Land and Pub. Util. Econ., May, 1940. Pp. 3.
LEROUGE, G. *L'interprétation administrative des lois fiscales.* Rev. de Sci. et de Législ. Finan., Jan.-Mar., 1940. Pp. 21.
MERRY, H. J. *Federal estate and gift tax: concept of a transfer.* Michigan Law Rev., May, 1940. Pp. 14.
PEARCE, F. L. *Trends in federal tax procedure.* Jour. Accountancy, May, 1940. Pp. 7.
POPPER, D. H. *Six years of American tariff bargaining.* Foreign Policy Assoc., Apr. 15, 1940. Pp. 11.
SEIDMAN, J. S. *Legislative history in federal income tax cases.* Taxes, June, 1940.
SURREY, S. S. *The Revenue act of 1939 and the income tax treatment of cancellation of indebtedness.* Yale Law Jour., May, 1940. Pp. 38.
Afterthoughts on the budget. Bankers' Insur. Manag. and Agents' Mag., June, 1940. Pp. 6.
British war finance. United Empire, Apr., 1940.
The budget problem. Economist (London), Apr. 6, 1940.
The federal fiscal situation. Conf. Bd. Econ. Record, June 24, 1940. P. 1.
The finance of war expenditure. Bull. Canterbury Chamber of Comm., May, 1940. Pp. 4.
Financing defense expenditures. Mo. Bank Letter Nat. City Bank, New York, June, 1940.
Financing the war. Bankers' Insur. Manag. and Agents' Mag., Apr., 1940. Pp. 12.
The national finances and the 1940-41 budget. Bankers' Insur. Manag. and Agents' Mag., May, 1940. Pp. 16.
Reconstruction Finance Corporation. Fortune, May, 1940.
Relative tax-paying ability of the states. Tax Policy, May, 1940.
Sir John Simon's budget for 1940-41. Bankers' Insur. Manag. and Agents' Mag., June, 1940. Pp. 21.
State finance—the trend toward budgetary equilibrium. Index, N.Y. Trust Co., Summer, 1940. Pp. 17.

Population and Migration

BERNARD, J. *The differential influence of the business cycle on the number of marriages in several age groupings.* Social Forces, May, 1940. Pp. 11.
COHEN, F. S. *Exclusionary immigration laws, their social and economic consequences.* Contemp. Jewish Record, Mar., 1940.
FRIIS, H. R. *A series of population maps of the colonies and the United States, 1625-1790.* Geograph. Rev., July, 1940. Pp. 17.
DE JONG, E. VAN Z. *Foreigners a small element in Indies population.* Far East. Survey, May 22, 1940. Pp. 2.
LARSON, O. F. *Farm population mobility in the Southern Great Plains.* Social Forces, May, 1940. Pp. 7.
MACDOUGALL, G. D. A. *Inter-war population changes in town and country* (with discussion). Jour. Royal Stat. Soc., part i, 1940. Pp. 31.
RHODES, E. C. *Population mathematics.* I. Jour. Royal Stat. Soc., pt. i, 1940. Pp. 29.
SPENGLER, J. J. *Population movements and economic equilibrium in the United States.* Jour. Pol. Econ., Apr., 1940. Pp. 30.
The problem of surplus agricultural population. Internat. Jour. Agrarian Affairs, Oct., 1939.

Social Problems and Reforms

ABELARDE, P. E. *A proposal towards a more practical approach to the political and economic preparedness of the Philippines.* Philippine Soc. Sci. Rev., Feb., 1940. Pp. 8.
CRIST, R. E. *The peasant problem in Yugoslavia.* Scientific Mo., May, 1940. Pp. 18.
DANKERT, C. E. *Machinery and economic insecurity.* Am. Fed., Apr., 1940. Pp. 15.

EDWARDS, G. W. *Scientific progress and the evolution of capitalism.* Scientific Mo., July, 1940. Pp. 9.

FONG, H. D. *War-time economic reconstruction in China.* Nankai Soc. and Econ. Quart., Jan., 1940. Pp. 12.

GORGAS, N. *The storage and issuance of hospital supplies.* Jour. Bus. Univ. Chicago, pt. 1, Apr., 1940. Pp. 33.

HOFFNER, C. *Recent developments in compulsory systems of family allowances.* Internat. Lab. Rev., Apr., 1940. Pp. 24.

KYRKILITSIS, A. *La guerre et l'économie mondiale.* Rev. des Sci. Econ. et Finan., Jan.-Mar., 1940. Pp. 19.

LACHMANN, K. *Economic and social developments through the European war: the Franco-British bloc.* Soc. Research, May, 1940. Pp. 14.

MOTTOULLE, L. *Medical aspects of the protection of indigenous workers in colonies.* Internat. Lab. Rev., Apr., 1940. Pp. 10.

NICHOL, F. W. *Vocational guidance.* Vital Speeches, Apr. 15, 1940. Pp. 2.

DE SZÁDECZKY-KARDOSS, T. *The economic life at war.* Jour. de la Soc. Hongroise de Stat., xvii[e] année, no. 4, 1939. Pp. 12.

TING, L. G. *War and industry in China.* Nankai Soc. and Econ. Quart., Jan., 1940. Pp. 38.

WILBUR, R. L. *Medical care for the American people.* Vital Speeches, May 15, 1940. Pp. 3.

Family expenditures for medical care, personal care, and miscellaneous items. Mo. Lab. Rev., May, 1940. Pp. 18.

German social policy in war-time. Weekly Report, German Inst. for Bus. Res. Suppl., May 22, 1940. Pp. 4.

A social programme for the British West Indies. Internat. Lab Rev., May, 1940. Pp. 12.

Insurance and Pensions

AUGUSTIN, G. *Die Reform der deutschen Arbeitslosenversicherung.* Les Assurances Sociales Suppl., Jan.-Feb., 1940. Pp. 9.

JOHNSON, E. M. *Added compensation hazard of older workers.* Am. Fed., Apr., 1940. Pp. 6.

MALISOFF, H. *The import of theory in unemployment compensation.* Pol. Sci. Quart., June, 1940. Pp. 10.

SAWA, S. *The organization of insurance pools in Japan.* Kyoto Univ. Econ. Rev., Jan., 1940. Pp. 8.

Adequacy of unemployment compensation vs. tax reductions. Am. Fed., Apr., 1940. Pp. 5.

The compensation of war victims: general principles. I, II. Internat. Lab. Rev., Apr., May, 1940. Pp. 17, 11.

Savings-bank life insurance in Massachusetts and New York, 1939. Mo. Lab. Rev., Apr., 1940. Pp. 10.

Pauperism, Charities, and Relief Measures

BRIDGES, S. *The relief problem.* Vital Speeches, May 15, 1940. Pp. 2.

CHAPIN, F. S. and JAHN, J. A. *The advantages of work relief over direct relief in maintaining morale in St. Paul in 1939.* Amer. Jour. Soc., July, 1940. Pp. 10.

GILL, C. *Local non-WPA work relief.* Am. Fed., Apr., 1940. Pp. 3.

Care of aged in old people's homes. Mo. Lab. Rev., May, 1940. Pp. 19.

Socialism and Coöperative Enterprises

MASLOW, H. *Coöperatives enter the dismal trade.* Am. Fed., May, 1940. Pp. 3.

Statistics and Its Methods

BANCROFT, G. *Consistency of information from records and interviews.* Jour. Am. Stat. Assoc., June, 1940. Pp. 5.

BARTLETT, M. S. *The present position of mathematical statistics* (with discussion). Jour. Royal Stat. Soc., part i, 1940. Pp. 29.

BERKSON, J. *A note on the chi-square test, the Poisson and the binomial.* Jour. Am. Stat. Assoc., June, 1940. Pp. 6.

BLISS, C. A. *Statistics takes a second breath.* Harvard Bus. Rev., Summer, 1940. Pp. 10.

BRAYER, E. F. *Can safety be handled statistically?* Jour. Am. Stat. Assoc., June, 1940. Pp. 3.

BROWN, A. J. *Resources available for war: a comparison.* Oxford Econ. Papers, Feb., 1940. Pp. 22.

CAMP, B. H. *Further comments on Berkson's problem.* Jour. Am. Stat. Assoc., June, 1940. Pp. 9.

CAO-PINNA, M. *Sulla rappresentatività e comparabilità degli indici del costo della vita calcolati in Italia.* Riv. Ital. di Sci. Econ., Mar., 1940. Pp. 15.

CONKLIN, G. *The census: social yardstick of America.* Social Studies, May, 1940. Pp. 7.

CRON, L. E. *An application of analysis of co-variance to price-quality relationships of eggs.* Jour. Farm. Econ., May, 1940. Pp. 6.

DOUGLAS, P. H. and GUNN, G. *Further measurements of marginal productivity.* Quart. Jour. Econ., May, 1940. Pp. 30.

GEARY, R. C. *The mathematical expectation of the mean square contingency when the attributes are mutually independent.* Jour. Royal Stat. Soc., pt. i, 1940. Pp. 2.

GILLETT, R. L. *Problems and progress in state statistics.* Jour. Am. Stat. Assoc., June, 1940. Pp. 6.

GINI, C. *Sur la "méthode des profils" et sur d'autres diagrammes à ordonnées jointes, dans le cas de séries non ordonnées* (avec résumé anglais). II. Rev. de l'Inst. Internat. de Stat., 7 Année, 1939. Pp. 22.

HAFSTAD, L. R. *On the Bartels technique for time-series analysis, and its relation to the analysis of variance.* Jour. Am. Stat. Assoc., June, 1940. Pp. 15.

HOSTELET, G. *L'emploi des indices dans les sciences et spécialement dans les sciences sociales* (avec résumé anglais). Rev. de l'Inst. Internat. de Stat., 7 Année, 1939. Pp. 12.

JORDAN, C. *Le rôle du calcul des différences finies en statistique.* Jour. de la Soc. Hongroise de Stat., xvii[e] année, no. 4, 1939. Pp. 8.

KALECKI, M. and TEW, B. *A new method of trend elimination.* Econometrica, Apr., 1940. Pp. 13.

DE LAKY, D. *Les représentants académiciens de la grande epoque de la statistique hongroise. (Éloge de Joseph Kőrösy, Antoine Vizaknai, Baron Louis Láng et Jules Vargha).* Jour. de la Soc. Hongroise de Stat., xvii[e] année, no. 4, 1939. Pp. 14.

MARTIN, J. L. *Income payments to individuals, by states, 1929-38.* Survey Current Business, Apr., 1940. Pp. 8.

ROPER, E. *Sampling public opinion.* Jour. Am. Stat. Assoc., June, 1940. Pp. 10.

WELD, L. D. H. *How consumer purchases vary with the seasons in 29 regions.* Dun's Rev., June, 1940. Pp. 6.

WILKS, S. S. *Representative sampling and poll reliability.* Pub. Opinion Quart., June, 1940. Pp. 9.

Cost of living in New York City, 1926-1940. Conf. Bd. Econ. Record, May 2, 1940. Pp. 6.

Cost of living in the United States and 51 cities. Conf. Bd. Econ. Record, Apr. 5, 1940. Pp. 4.

How families spend their income. Fed. Home Loan Bank Rev., Mar., 1940.

NOTES

The program of the fifty-third annual meeting of the American Economic Association, to be held in New Orleans, December 27-30, is close to completion. Participants in a series of sessions on pressing national problems are to hold an advance conference at Hillside, the Riverdale quarters of the National Bureau of Economic Research, on September 16-17, for the discussion of preliminary drafts of papers to be presented at New Orleans. These papers will deal with the federal budget, the price level and the gold problem, private investment, unemployment, agriculture, the present and prospective position of the United States in the world economy, the economic consequences of the war to the United States, and, in general, with the impact of defense preparations on the national economy. Two sessions at New Orleans will be devoted to economic research. Speakers will discuss the rôle in research of the foundations, private research agencies, conferences and other coöperative groups, the universities, the Social Science Research Council, business organizations, and government. The program also includes meetings on causal factors in economic regionalism, the economics of Alfred Marshall, and the economic consequences of war since 1790. The program as a whole will be jointly sponsored by the American Economic Association and the Southern Economic Association.

The activities at New Orleans will include a smoker, an afternoon tea and a free Sunday for sightseeing and visiting. A special committee on hospitality and entertainment will coöperate with the committee on local arrangements.

The headquarters of the Association will be at the Roosevelt Hotel. Requests for reservations should be addressed to Donald M. Halley, c/o Convention and Visitors Bureau, Box 1460, New Orleans, Louisiana.

Members interested in obtaining reservations on special trains should communicate with C. Reinold Noyes, 455 East 51st Street, New York City, for the Eastern Seaboard, and with James Washington Bell, Northwestern University, Evanston, Illinois, for the Central States. Bernard F. Haley, Stanford University, California, is in charge of transportation arrangements for the Pacific Coast.

The following names have been added to the membership of the AMERICAN ECONOMIC ASSOCIATION since May 1:

Bangs, R. B., Brown University, Providence, R. I.
Bourne, W. N., 66 Sparks St., Cambridge, Mass.
Bunting, F. H., Woman's College, Univ. of North Carolina, Greensboro, N.C.
Burrill, C. L., 37 Secor Rd., Scarsdale, N.Y.
Corey, H. D., Dept. of Econ., College of William and Mary, Williamsburg, Va.
Cornateanu, N., Institutul Agronomice, Bulevardul Marasti 61, Bucarest, Rumania.
Coyne, W. J., 308 S. William St., South Bend, Ind.
Daly, M., Dept. of Econ., Wayne University, Detroit, Mich.
Finney, T. W., Tulsa Chamber of Commerce, Tulsa, Okla.
Foley, J. H., Jr., 20 Summer St., Providence, R.I.
Goldner, W., Agric. Workers Health and Medical Assoc., 414 Call Bldg., San Francisco, Calif.
Gregory, P. M., Clark University Faculty House, Worcester, Mass.
Gustafson, G. T., Farm Credit Administration of St. Paul, St. Paul, Minn.
Hays, C. C., Pulaski, N.Y.
Hoag, P., Eastman Kodak Co., Kodak Pk., Rochester, N.Y.
Holden, G. R., 343 State St., Rochester, N.Y.
Hustad, H. R., 1775 Broadway, New York City.
Jeuck, J. E., School of Business, University of Chicago, Chicago, Ill.
Kane, J. E., University of Arkansas, Fayetteville, Ark.
Kneeland, H., U. S. Dept. of Agric., Bur. of Agric. Econ., Washington, D.C.

Lange, C., Suite 4600, Chrysler Bldg., New York City.
Leggett, L., 315 Granite St., Apt. 19, Reno, Nev.
Lillaston, J. B., 1902 Colonial Terrace, Arlington, Va.
Loftus, J. A., Holy Cross College, Worcester, Mass.
Longstreet, V. M., The Westchester, Apt. 734B, Washington, D.C.
Michener, A. M., 1622 29th St., N.W., Washington, D.C.
Miller, J. D., Jr., 619 9th St., Columbus, Ind.
Mirkowich, N., Dept. of Econ., University of California, Berkeley, Calif.
Nathanson, N. L., 1000 Montgomery St., Brooklyn, N.Y.
Papier, W., Ohio Bur. of Unemp. Comp., Div. of Res. and Statis., 427 Cleveland Ave., Columbus, Ohio.
Peterson, N. E., 96 Abbott Rd., Wellesley Hills, Mass.
Reeve, Mrs. V. D., 106 3rd St. N.E., Washington, D.C.
Robbins, S., 2710 Morris Ave., Bronx, New York City.
Rosenfeld, M., Div. of State Planning, 333 Broadway, Albany, N.Y.
Schiff, E., Brookings Inst., 722 Jackson Pl. N.W., Washington, D.C.
Schmid, C. G., 1431 Pleasant St., Indianapolis, Ind.
Shapiro, E., Brooklyn Coll., Bedford Ave. and Ave. H, Brooklyn, N.Y.
Shaw, F. B., 64 E. Lake St., R. 1400, Chicago, Ill.
Shearon, M., Social Security Board, Washington, D.C.
Snell, H. K., University of Southern California, Los Angeles, Calif.
Spiegel, D. K., 390 Riverside Dr., New York City.
Tamby, F. J., 684 Riverside Dr., New York City.
Theodorides, A., University of Toledo, Toledo, Ohio.
Thomas, H. P., Dept. of Econ., University of Richmond, Richmond, Va.
Webb, J. N., 400 W. Broad St., Falls Church, Va.
Wennstrom, J. M., 102 Maiden Lane, New York City.
Williams, C. S., 24 E. Columbia Ave., Palisades Park, N.Y.
Woodward, D. B., 205 W. 54th St., New York City.
Yost, J. W., Industry Service Bureaus, 53 Park Pl., New York City.
Zavoico, B. B., 18 Pine St., New York City.
Ziskind, D., 200 N. Piedmont St., Arlington, Va.

The annual meeting of the American Statistical Association will be held in Chicago, Illinois, from December 26 to 28.

Eighty-five awards, totalling more than $95,000, for the academic year 1940-41, have been announced by the Social Science Research Council. Twelve awards, carrying a basic stipend of from $1,800 to $2,500, plus travel allowances, cover post-doctoral research training fellowships to men and women under thirty-five years of age who have a Ph.D. degree or its equivalent. Seventeen appointments are pre-doctoral field fellowships which carry a basic stipend of $1,800. The recipients are graduate students under thirty years of age who have completed all the requirements for the Ph.D. degree except the thesis. The remaining fifty-six awards are research grants-in-aid, designed to assist mature scholars in the completion of research projects already well under way. Of the total number, only six appointees will engage in foreign travel—one to China, one to Great Britain, one to Guatemala, one to Bolivia, one to Brazil and Argentina, and one to the British West Indies. A list of awards may be obtained from the secretary of the Social Science Research Council, 230 Park Avenue, New York City.

The National Conference of State University Schools of Business has elected the following officers: president, C. C. Fichtner, University of Arkansas; vice-president, A. M. Weimer, Indiana University; secretary-treasurer, W. Mackenzie Stevens, University of Maryland.

The twelfth Boston Conference on Distribution will be held in Boston at the Hotel Statler, October 7-8. Particulars may be obtained from Daniel Bloomfield, director, 80 Federal Street, Boston.

Occidental College, Los Angeles, California, is holding its third Institute of Economics and Finance, October 17-19. Economists from different parts of the country will be present and participate in the meetings which will center upon three fields: (1) money, credit and prices; (2) economic stability and full employment; (3) international economic problems. The meetings are open without fee to interested economists.

The University of Pennsylvania will hold a Bicentennial Conference, September 16-20. One section will be devoted to the social sciences. Among the speakers, with subjects are the following: Wesley Clair Mitchell, Columbia University, "Economic Resources and Their Employment"; William Henry Beveridge, University College, Oxford, "The Trade Cycle in Fact and in Theory"; John K. Mathieson, American Institute of Accountants, "The Professional Accountant's Responsibilities to the Public"; Phillip L. West, New York Stock Exchange, "Management's Responsibilities to the Public for Accounting Reports"; William W. Werntz, Securities and Exchange Commission, "The Government's Responsibility for the Regulation of Accounting Reports"; John Maurice Clark, Columbia University, "Investment in Relation to Business Activity and Employment"; Simon Smith Kuznets, University of Pennsylvania, "Investment and Capital Formation in the United States, 1880-1940"; Alvin Harvey Hansen, Harvard University, "Incentives to Investment, Past and Present"; Sumner Huber Slichter, Harvard University, "The Development of a National Labor Policy"; William Beveridge, University College, Oxford, "Long-Time Price Movement in England"; Arthur Harrison Cole, Harvard University, "Fluctuations in American Prices, 1740-1940"; Earl Jefferson Hamilton, Duke University, "Prices, Wages and the Industrial Revolution." For fuller particulars address the registrar of the Bicentennial Conference, University of Pennsylvania, Philadelphia.

The Industrial Relations Section of Princeton University has available for use by coöperating companies and organizations a limited number of copies of a memorandum entitled: *Outline of Industrial Relations Policies in Defense Industries.*

The Argentine Grain and Elevator Commission announces the regular publication of an English issue of its *Informative Bulletin.* The Spanish edition, *Boletin Informativo,* which has been published fortnightly since November, 1936, covers provisions governing the country's grain industry, original surveys by the technical staff of the Commission, and translations of pertinent studies in other languages.

Jacob H. Hollander, professor of political economy at Johns Hopkins University, died July 9, 1940. Professor Hollander was president of the American Economic Association in 1921.

George W. Stephens, dean at Washington University, St. Louis, died May 13, 1940.

Appointments and Resignations

Albert Abrahamson, associate professor of economics at Bowdoin College, completed his year's work as executive director of the Jewish Occupational Council in June and returns to his regular college duties in September.

Gardner Ackley of Ohio State University is an instructor in economics at the University of Michigan.

George P. Adams, Jr., of the University of California has been appointed instructor in economics at Cornell University.

Conley R. Addington is assistant professor of accounting in the School of Business Administration, University of Miami.

Richard M. Alt is an instructor in economics at Princeton University.

Clarence E. Ayres of the University of Texas will be visiting professor of economics at the University of Washington during the autumn quarter.

Robert B. Banks has accepted a university fellowship at Brown University.

E. F. Beach has been appointed assistant professor of commerce at McGill University and acting director of the School of Commerce at that university.

E. M. Bernstein has returned to the University of North Carolina after a quarter of Kenan leave of absence.

Roy G. Blakey of the University of Minnesota received an honorary degree of doctor of laws from Drake University on June 3, 1940. Professor Blakey is an alumnus of Drake's College of Liberal Arts.

John G. Blocker, professor of accounting at the University of Kansas, has been appointed lecturer in accounting for the year 1940-41 at the University of California, Berkeley.

Lawrence Bloomberg of Johns Hopkins University has been appointed assistant director of research in mortgage and real estate finance with the American Bankers Association.

D. O. Bowman, instructor in economics at Purdue University, has returned after a year's leave of absence spent at Brookings Institution on a fellowship from the University of Michigan.

Robert A. Brady of the University of California, Berkeley, will teach at Columbia University during the coming year.

Howard A. Bridgman is an instructor in economics at Brown University for the coming academic year.

Douglass V. Brown has been promoted to the rank of associate professor of industrial relations at the Massachusetts Institute of Technology. During the summer he served with the Advisory Commission to the Council of National Defense.

Robert D. Calkins will be on sabbatical leave from the University of California, Berkeley, during the spring semester of 1941.

Alexander E. Cance, head of the department of economics at the Massachusetts State College, returns to his duties this autumn after six months' leave of absence which he spent travelling through Mexico and Guatemala.

James J. Carney, Jr., is assistant professor of finance in the School of Business Administration, University of Miami.

Warren B. Catlin, professor of economics at Bowdoin College, has a sabbatical leave for the year 1940-41.

Robert E. Chaddock has been designated by the trustees of Columbia University as executive officer of the department of social science.

Gerhard Colm is on leave of absence from the graduate faculty of political and social science in the New School for Social Research and has been appointed economic consultant in the Bureau of the Budget.

Joseph D. Coppock will remain at the University of California, Berkeley, during the autumn of 1940 before joining the department of economics at Haverford College in January, 1941.

Virgil D. Cover, assistant professor of public utilities and transportation at the University of Arkansas, served as transportation economist for the Tennessee Valley Authority during the summer.

Ira B. Cross is chairman of the department of economics, University of California, Berkeley.

Calvin Crumbaker is to be acting dean of the School of Social Science and chairman of the department of economics at the University of Oregon during the absence of Dean James H. Gilbert.

Herbert J. Cummings has been promoted to an instructorship in the department of economics and accounting at the University of Pittsburgh.

Arthur L. Cunkle is to be instructor in statistics in the College of Business Administration of the University of Arkansas.

Ralph L. Dewey is chief of the Transportation Section of the National Resources Planning Board which is conducting a study of national transportation policy. He is on temporary loan from the federal Department of Agriculture, where he is in charge of transportation research. It is expected that the report will be completed by July 1, 1941, at which time he will return to the Department of Agriculture.

Dudley Dillard of the University of California has been appointed instructor in economics at the University of Colorado for the year 1940-41.

Paul A. Dodd of the University of California at Los Angeles will be on leave for the coming academic year, to study labor arbitration in Australia and New Zealand, on a Rockefeller fellowship.

J. E. Dykestra of the University of Missouri has been appointed associate professor of business administration at the University of North Carolina.

Charles H. Fernald has been appointed assistant professor of marketing on the staff of the College of Business Administration of the University of Arkansas.

Allan J. Fisher, assistant professor of business administration at the University of Maryland, has been appointed contributing editor of the accounting cases department of the *Accounting Review*. During the summer he served as associate agricultural economist in the federal Bureau of Agricultural Economics, doing research on farm insurance.

John V. Fordon resumes his duties in the College of Economics and Business, University of Washington.

Richard L. Funkhouser, assistant dean of the Amos Tuck Schoool of Administration and Finance, Dartmouth College, has been appointed secretary-treasurer of the American Statistical Association.

J. K. Galbraith, assistant professor of economics at Princeton University, has been granted leave of absence for a year to serve as economist to the American Farm Bureau Federation.

John D. Gemmill of the City College is teaching courses in the Kansas State Teachers College of Emporia under an exchange arrangement.

James H. Gilbert, dean of the School of Social Science and chairman of the department of economics at the University of Oregon, will spend the autumn quarter investigating banking in New Zealand and Australia.

R. A. Gordon will be on leave from the University of California, Berkeley, during the autumn to continue his study of business leadership at the Brookings Institution.

Edward C. Griffith of the University of Virginia has been appointed assistant professor of economics at the University of Georgia.

Charles A. Gulick will be on sabbatical leave from the University of California, Berkeley, for the spring semester of 1940-41.

Charles A. Hales has been promoted to associate professor of economics at the Colorado State College of Education.

George N. Halm of Tufts College taught courses in money and banking and in business cycles during the summer session at Harvard University.

Evan B. Hannay is an instructor in economics at Princeton University.

Albert Gailord Hart of Iowa State College gave courses in money and banking at the University of Chicago during the summer.

Gabriel S. Hauge has been appointed instructor in economics at Princeton University.

J. Edward Hedges has resigned from Emory University to accept a position as assistant professor of insurance at the School of Business, University of Indiana.

Clarence Heer resumes his duties at the University of North Carolina after a year on leave which he spent with the Federal Fiscal Agency in Washington.

W. Braddock Hickman, instructor in economics at Princeton University, has been awarded a research fellowship for 1940-41 by the National Bureau of Economic Research.

Harold J. Hoflich has been appointed assistant professor of economics at Kent College, Ohio.

Henry F. Holtzclaw of the University of Kansas has been granted a leave of absence for 1940-41 to continue his work as regional adjudicator of the Kansas City office of the United States Railroad Retirement Board.

A. W. Jamison, professor of economics at the University of Arkansas, has retired from active teaching with the rank of professor emeritus.

R. W. Jastram of the department of economics, Stanford University, has a year's leave of absence in order to serve as executive secretary of the committee studying business price policies and their social consequences, National Bureau of Economic Research.

Ernest A. Johnson, professor of economics at Lake Forest College, was a member of the faculty at the Schoool of Commerce of the University of Denver during the summer session.

Robert H. Johnson of the University of Iowa is an instructor at West Virginia University.

Miles H. Jones has been promoted to a full professorship and to the head of the department of business law at the University of Pittsburgh.

W. O. Jones is an acting instructor in economics at Stanford University.

P. C. Kelley, professor of marketing, University of Arkansas, has been appointed research consultant with the Arkansas Office of Education in Distributive Trades.

Matthew A. Kelly is a part-time instructor in economics at Princeton University.

John K. Langum of the School of Business Administration, University of Minnesota, is to be lecturer in economics for the year 1940-41 at the University of California.

Albert T. Lauterbach taught at Brooklyn College during the spring term and joins the Princeton Institute for Advanced Study in September.

Richard A. Lester has resigned as assistant professor of labor at the University of Washington to accept a position as assistant professor of economics at Duke University.

James P. Lichtenberger retired from Wharton School, University of Pennsylvania at the end of the academic year 1939-40. He was president of the American Sociological Society, and he served a long term as secretary of the American Academy of Political and Social Science.

Laurence R. Lunden has been promoted to the rank of associate professor in the School of Business Administration at the University of Minnesota.

J. Edward Lundy is an instructor in economics at Princeton University.

Francis McIntyre of the Cowles Commission for Research in Economics, who has served during the past year as assistant professor of economics at Stanford University, has accepted a position as assistant professor of economics at Indiana University.

Donald H. Mackenzie resumes his duties at the College of Economics and Business, University of Washington.

W. Rupert Maclaurin has been promoted to the rank of associate professor of industrial relations at the Massachusetts Institute of Technology.

C. A. Matthews, instructor at West Virginia University, is pursuing graduate work at the University of Virginia.

B. J. Merriam of Judson College has been appointed instructor in public service industries at the University of Kansas.

A. F. Messenger has been promoted to the rank of assistant professor of economics at Purdue University.

E. J. Miller returns to the University of California at Los Angeles after a year's leave of absence for research and study in Washington, D.C.

Henry S. Miller has been promoted to the rank of assistant professor at Queens College, Flushing, New York.

Walter R. Myers of the School of Business Administration, University of Minnesota, will travel during the coming year, studying economic relationships between the United States and South American countries.

Alfred C. Neal, instructor in economics at Brown University, has been granted a Social Science Research Council pre-doctoral fellowship and will be absent from teaching duties during the coming year.

M. R. Neifeld, economist for the Beneficial Management Corporation, has been appointed lecturer in finance at the University of Newark for the academic year 1940-41.

Carl L. Nelson of Kansas State College has been appointed assistant professor of business organization and management at the College of Business Administration, University of Nebraska.

Raymond Nelson of the University of Virginia is an instructor in commerce at the Virginia Polytechnic Institute.

Nilan Norris has been appointed assistant professor of commerce at the University of Miami.

O. V. Overholser, professor of insurance at the University of Miami, will be on leave during the coming academic year.

Dudley F. Pegrum, chairman of the department of economics at the University of California at Los Angeles, taught during the summer session at the University of California, Berkeley.

E. F. Penrose will remain with the International Labor Office for the year 1940-41, on leave from the University of California, Berkeley.

Ralph R. Pickett head of the department of economics in the Kansas State Teachers College, taught in the summer session of the College of the City of New York as exchange professor.

Robert Rapp, associate professor of economics at the University of Tennessee, has been appointed assistant professor of economics at the University of California at Los Angeles.

Hayes A. Richardson of the University of Kansas has been appointed director of the Department of Welfare of Kansas City.

Roderick H. Riley has been appointed a principal economic analyst in the Bureau of Foreign and Domestic Commerce, to work in association with the economic adviser to the Secretary of Commerce.

E. O. Roberts, instructor at West Virginia University, is on leave to do graduate work at the University of Wisconsin.

Reginald H. Scott has been promoted to an assistant professorship in the department of economics, School of Business Administration, University of Pittsburgh.

Edward P. Shahan is an instructor in economics and statistics at the University of Miami.

I. L. Sharfman resumes his work at the University of Michigan after a sabbatical leave during the second semester of 1939-40.

W. K. Sharkey has been promoted to the rank of assistant professor of economics at Purdue University.

E. J. Sheppard has been promoted to the rank of associate professor of economics at Purdue University.

Lewis B. Sims, technical assistant to the chief statistician in the Division of State and Local Government of the federal Bureau of the Census, has been made acting assistant chief statistician. The loan of Mr. Sims's services to the President's Committee on Civil Service Improvement was terminated in May upon the completion of his report on *The Scholarship of Junior Professional Appointees in the Government Service.*

Frank A. Southard will spend his sabbatical year of absence from Cornell University in research on United States—South American economic relations, on a Guggenheim Fellowship.

Frederick F. Stephan has resigned as secretary-treasurer of the American Statistical Association to accept an appointment as professor of sociology at Cornell University.

Walter W. Stewart has been elected chairman of the board of trustees of the Rockefeller Foundation.

M. M. Stockwell of the University of California at Los Angeles was on leave during the second semester of 1939-40, visiting many states and Washington, D.C., on an investigation of tax and government budget problems.

Merton P. Stolz of the School of Business Administration, University of Minnesota, has been appointed assistant professor of economics at Brown University.

Richard S. Stoyle retired from Wharton School, University of Pennsylvania, at the end of the academic year 1939-40.

Arthur E. Suffern has been appointed lecturer in economics in the University of Newark.

Robert A. Sutermeister has been appointed associate in the College of Economics and Business at the University of Washington.

Paul S. Taylor will spend the autumn semester of 1940 on sabbatical leave from the University of California, Berkeley, studying agricultural labor problems.

Arthur R. Tebbutt has resigned as associate professor of economics at Brown University to accept a professorship in the School of Business Administration, Northwestern University.

Willard L. Thorp has been appointed a trustee for the Associated Gas and Electric Utility System which is undergoing reorganization.

Arthur R. Upgren returns to the School of Business Administration, University of Minnesota, after a half year's leave of absence to direct research on the effect of economic factors of war upon the United States under the auspices of the Council on Foreign Relations.

Henry H. Villard of the staff of the School of Business Administration, University of Minnesota, has been appointed assistant professor of economics at Amherst College.

D. Rutledge Vining, instructor in statistics at the University of Arkansas, has received his second year's award of the Julius Rosenwald Fellowship and will continue his research at the University of Chicago.

L. L. Waters has been promoted to the rank of assistant professor of finance at the University of Kansas.

Gordon S. Watkins of the University of California at Los Angeles delivered the commencement address at the University of Montana, where he received an LL.D. degree.

Charles R. Whittlesey of Princeton University has accepted an appointment as professor of finance and economics at the Wharton School, University of Pennsylvania.

Frank Willetts has been promoted to an instructorship in the department of accounting at the University of Pittsburgh.

John H. Wills has been appointed a part-time instructor in economics at Princeton University.

THIRTY-SEVENTH LIST OF DOCTORAL DISSERTATIONS IN POLITICAL ECONOMY IN PROGRESS IN AMERICAN UNIVERSITIES AND COLLEGES

Students whose period of continuous non-residence exceeds three years are omitted from the list. The last date given is the probable date of completion.

The first list of this kind was dated January 1, 1904, and was sent to all members, but not regularly bound in the publications. The subsequent lists have appeared in the publications as follows:

A notation as to the earlier lists, extending from 1905 to 1927, may be found in the *Review* for September, 1927, p. 574.

Twenty-fifth list, 1928, in the REVIEW for September, 1928, p. 589.
Twenty-sixth list, 1929, in the REVIEW for September, 1929, p. 533.
Twenty-seventh list, 1930, in the REVIEW for September, 1930, p. 574.
Twenty-eighth list, 1931, in the REVIEW for September, 1931, p. 582.
Twenty-ninth list, 1932, in the REVIEW for September, 1932, p. 561.
Thirtieth list, 1933, in the REVIEW for September, 1933, p. 560.
Thirty-first list, 1934, in the REVIEW for September, 1934, p. 573.
Thirty-second list, 1935, in the REVIEW for September, 1935, p. 614.
Thirty-third list, 1936, in the REVIEW for September, 1936, p. 581.
Thirty-fourth list, 1937, in the REVIEW for September, 1937, p. 638.
Thirty-fifth list, 1938, in the REVIEW for September, 1938, p. 621.
Thirty-sixth list, 1939, in the REVIEW for September, 1939, p. 673.

The present list specifies doctoral dissertations completed and accepted by the various universities, and, in cases where a publishing company was reported, this has been given. Titles not marked "completed" are assumed to be still in preparation. It will be noted that some thesis titles in the field of sociology are omitted, inasmuch as a list is published in the *American Journal of Sociology*.

The list represents the status of the several theses on May 1, 1940.

Theory and Its History

MOSES ABRAMOVITZ, A.B., Harvard, 1932. Price theory for a changing economy. *Columbia.* Accepted. (Published as No. 453 in Columbia Studies in History, Economics, and Public Law.)

ADOLPH G. ABRAMSON, A.B., West Virginia, 1929; A.M., Brown, 1936. Theories and tests of competition. 1940. *Brown.*

GARDNER ACKLEY, Ph.D., Michigan, 1940. Spatial price relations and imperfect competition. Accepted.

SIDNEY STUART ALEXANDER, S.B., Harvard, 1936; A.M., 1938. Theory of resource utilization. 1941. *Harvard.*

CLAY J. ANDERSON, B.S., Missouri, 1926; A.M., 1927. The development of public works theory and policy in relation to the business cycle. 1941. *Michigan.*

JOE STATEN BAIN, JR., Ph.D., Harvard, 1940. The value, depreciation, and replacement of durable capital goods. Accepted.

JOHN A. BAKER, B.S., Arkansas, 1935. Theory of agricultural land income. 1941. *Wisconsin.*

CLAUDE DAVID BALDWIN, B.Sc., Denver, 1937; M.S., Illinois, 1938. Theoretical considerations of economic planning. 1940. *Illinois.*

ROBERT BABBITT BANGS, A.B., Coe, 1935; A.M., Tufts, 1937. Problems in the theory of income and capital. 1941. *Brown.*

JOHN M. BLAIR, B.A., Tulane, 1936. A study of value and wages in selected industries. 1941. *American.*

FRANCIS MURRAY BODDY, B.B.A., Minnesota, 1930; A.M., 1936. The influence of costs on production and price policy in a joint-product industry. 1939. *Minnesota.* Completed.

SAMUEL E. M. BRENHOUSE, A.B., McGill, 1933; M.A., 1934. Profit and equilibrium—a study in the dynamics of balance. 1942. *Columbia.*

MARTIN BRONFENBRENNER, Ph.D., Chicago, 1939. Monetary theory and general equilibrium. Accepted.

YALE BROZEN, A.B., Chicago, 1939. Some economic implications of technological change. 1940. *Chicago.*

BENJAMIN CAPLAN, A.B., McGill, 1930; A.M., 1931. The Wicksellian monetary school of Sweden. 1940. *Chicago.*

JAMES J. A. CAREY, A.B., St. Francis, 1918. Theory of property rights in the Christian tradition. 1941. *Columbia.*

WALTER ALEXANDER CHUDNOWSKY, A.B., Pennsylvania, 1934; A.B., Oxford, 1936. An empirical study of factors affecting corporate capital outlays. 1941. *Columbia.*

RICHARD M. CLEWETT, A.B., Nevada, 1934. Theory and practice of differential pricing. 1942. *Pennsylvania.*

MARSHALL R. COLBERG, A.B., Chicago, 1934; A.M., 1938. The theory of tax shifting. 1941. *Michigan.*

WILLIAM HENRY CONLEY, B.C.S., Loyola, 1930; M.B.A., Northwestern, 1932. Modern interpretation of the economics of Thomas Aquinas. 1941. *Northwestern.*

SISTER MARY THOMASINE CUSACK, O.P., A.B., Rosary, 1928; A.M., Catholic, 1936. The significance of a changing concept of ownership to current economic and social planning. *Catholic.* Completed.

BERNARD WILLIAM DEMPSEY, A.B., St. Louis, 1928; A.M., 1929. A comparative study in interest theories. *Harvard.*

LEONARD ANTHONY DOYLE, B.A., Antioch, 1935; M.A., Ohio State, 1937. The economic theory of costs in relation to accounting practice. 1941. *Ohio State.*

IVAN V. EMELIANOFF, Polytechnic Institute of Emperor Alexander II, Kiev; Russian Academic Group, Czechoslovakia. Economic theory of coöperation. 1940. *Columbia.*

RICHARD G. GETTELL, A.B., Amherst, 1933. Pluralistic competition: with an illustrative case study of the rubber tire industry. 1940. *California.*

EVERETT EINER HAGEN, B.A., St. Olaf, 1927; M.A., Wisconsin, 1932. The capital concept. 1941. *Wisconsin.*

EARL C. HALD, Ph.D., California, 1939. A critique of Hawtrey's cycle theory.

RANDALL WESTON HINSHAW, A.B., Occidental, 1937; A.M., 1939. Wages and employment. 1941. *Princeton.*

M. THOMAS KENNEDY, A.B., Swarthmore, 1934. Theory of unemployment due to mechanization. 1942. *Pennsylvania.*

HAROLD GREGG LEWIS, A.B., Chicago, 1936. The demand for steel. 1940. *Chicago.*

J. EDWARD LUNDY, A.B., Iowa State, 1936. The theory of international values. 1941. *Princeton.*

DONALD BAILEY MARSH, B.A., New Brunswick, 1935; M.A., Louisiana State, 1936. The classical theory of international trade in the light of the assumptions of imperfect competition. 1940. *Illinois.*

ROSSER B. MELTON, Ph.D., Texas, 1940. The theory of value in economics as a rationalization of social status. Accepted.

MAX F. MILLIKAN, B.S., Yale, 1935. Studies in the theory of imperfect competition. 1941. *Yale.*

MAURICE MOONITZ, B.S., California, 1933. Obsolescence and the theory of economic fluctuations. 1940. *California.*

THOMAS HAYES MOORE, B.S., Roanoke, 1938. The position of economists with respect to wage changes at different stages of conjuncture, 1919-1939. 1941. *Duke.*

RICHARD L. MORSE, A.B., Wisconsin, 1938. Egg grading practices and consumer egg preferences in Iowa—a study of demand and of market standards. 1941. *Iowa State* or *Chicago.*

RUSSELL TOULMIN NICHOLS, A.B., DePauw, 1929. Theory and measurement of national income. 1940. *Chicago.*

JOHN ALGOT NORDIN, B.A., Minnesota, 1935; A.M., 1937. Recent interest theory. 1941. *Minnesota.*

HENRY MADISON OLIVER, A.B., Southwestern, 1934; M.A., Duke, 1936. Some concepts of economic justice. 1939. *Duke.* Accepted.
FREDLYN RAMSEY, A.B., A.M., Missouri, 1930. Equilibrium of an industry in a free enterprise economy. 1940. *Chicago.*
JOSEPH S. RANSMEIER, A.B., Oberlin, 1936. The theory of multiple-purpose enterprise in waterway development, with particular reference to the TVA. 1941. *Columbia.*
DAVID ROCKEFELLER, B.S., Harvard, 1936. The theory of unused capital resources. 1940. *Chicago.*
MICHAEL SAPIR, A.B., Yale, 1934. Economic theory and the concept of exploitation in selected writers. 1940. *Chicago.*
PHILIP SCHAFFNER, B.A., Princeton, 1933; M.A., Ohio State, 1936. The clearing principle and money theory. 1940. *Ohio State.*
GEORGE SCHULLER, B.S., New York, 1931. Bargaining power theories of distribution. 1941. *Columbia.*
CHARLES J. SHOHAN, Ph.D., Chicago, 1939. The conception of economics in American economic thought, 1886-1895. Accepted.
LAWRENCE ALEXANDER SKEOCH, B.A., McMaster, 1932; M.A., Toronto, 1939. The economic and social theories of John R. Commons. 1941. *Toronto.*
REUBEN E. SLESINGER, B.S., Pittsburgh, 1936; M.A., 1938. A criticism of orthodox value theories in the light of actual marketing situations. 1940. *Pittsburgh.*
VIRGINIA BISHOP SLOAN, B.A., Texas, 1925; M.A., 1928. Social attitudes toward poverty and class distinctions implicit in classical economic doctrines. *Texas.*
HAROLD M. SOMERS, B. of Com., Toronto, 1937. Statistical and theoretical analysis of national income. 1941. *California.*
LEONA SPILMAN, B.S., Oklahoma Agricultural and Mechanical, 1919; M.S., 1921. A comparison of the institutionalisms of Veblen and Commons. 1940. *Wisconsin.* Accepted.
SIDNEY C. SUFRIN, Ph.D., Ohio State, 1940. The economic theory of wages and hours legislation. Accepted.
MABEL FRANCES TIMLIN, B.A., Saskatchewan, 1929. Keynesian economics: a synthesis. 1940. *University of Washington.*
WILLIAM SPENCER VICKERY, B.S., Yale, 1935; A.M., Columbia, 1937. Behavior of marginal costs. 1941. *Columbia.*
LEO WARSHAW, Ph.D., Toronto, 1940. Concepts of liberty, justice and equality in communistic theory and practice. Accepted.
HOMER W. WEIDENER, B.A., M.A., Oberlin. Consumption theory and expenditure patterns. 1940. *Ohio State.*
MICHAEL WERMEL, Ph.D., Columbia, 1939. The development of classical wage theory. (Published by Columbia University Press.)
VIRGEL G. WILHITE, B.A., Oklahoma, 1921; M.A., 1930. Some near economists of eighteenth-century America. 1940. *Wisconsin.* Accepted.
JOHN HARVEY WILLS, B.S., Massachusetts Institute of Technology, 1926. The theory of credit. 1941. *Princeton.*
NATHANIEL WOLLMAN, Ph.D., Princeton, 1940. The market concept in value analysis. Accepted.

Economic History and Geography

WILLIAM C. BAGLEY, JR., A.B., Yale, 1930. A preface to the Civil War. 1940. *Columbia.*
WYATT W. BELCHER, A.B., A.M., Oklahoma, 1932. Economic rivalry between St. Louis and Chicago, 1850-1880. 1941. *Columbia.*
ALDEN D. CUTSHALL, B.E., Eastern Illinois State Teachers; M.A., Illinois. The industrial structure of the Lower Wabash Valley. 1940. *Ohio State.*
F. J. ERICSON, A.B., Broadview (Illinois), 1924; A.M., Chicago, 1929. Mercantilism or imperialism as a cause of the American Revolution. 1940. *Chicago.*
MOSES ISAIAH FINKELSTEIN, A.B., Syracuse, 1927; A.M., Columbia, 1929. Economic policy of the Athenian state in the fifth and fourth centuries. 1940. *Columbia.*

WILBERT G. FRITZ, B.S., Kansas State Agricultural, 1927; M.B.A., Northwestern, 1928. Regional economic factors in the United States. 1940. *Columbia.*

THEODORE GEIGER, B.S.S., College of the City of New York, 1935. The economic organization of slavery in antebellum Virginia. 1941. *Columbia.*

ELEANOR S. GODFREY, A.B., Smith, 1935; A.M., Chicago, 1936. Government and regulation of industry in the reign of James I as illustrated by the monopolies. 1940. *Chicago.*

ROBERT EDWARD GRAHAM, JR., B.S., Clemson, 1936; M.S., Virginia, 1937. The industrial development of the South, 1899-1937, in its relation to agriculture. 1941. *Virginia.*

RALPH MURRAY HAVENS, A.B., Baker, 1927; M.B.A., Kansas, 1933. Laissez-faire in the United States during the nineteenth-century depressions. 1941. *Duke.*

MURIEL E. HIDY, Ph.D., Radcliffe, 1939. George Peabody, merchant and financier, 1829-54. Accepted.

CHIANG HSIEH, B.A., Yenching, China; A.M., Harvard, 1938. The causes of the 1929 depression. *Harvard.*

WILLERY JACKSON, A.B., Mississippi State College for Women, 1921. The repudiation of the planters' bank and the Mississippi union bank bonds. 1941. *Columbia.*

J. RICHARD JONES. Anglo-French trade under Elizabeth. *Pennsylvania.*

M. A. KUHN, A.B., Park (Missouri), 1931; A.M., Chicago, 1934. Economic factors in the development of the Republican Party, 1852-1860. 1940. *Chicago.*

JOHN A. LEVANDIS, B.S., Delaware, 1921; A.M., Columbia, 1922. The history of international financial control in Greece. 1941. *Columbia.*

BERTIE MELVEL MCGEE, Ph.D., North Carolina, 1939. The industrial development of North Georgia. Completed.

EDGAR WINFIELD MARTIN, A.B., Washburn, 1932; A.M., Chicago, 1934. The standard of living in the United States about 1860. 1940. *Chicago.*

MARGARET E. MARTIN, A.B., Barnard, 1933; A.M., Columbia, 1934. Merchants and trade of the Connecticut River Valley, 1750-1830. *Columbia.* Accepted.

B. G. MATTSON, JR., A.B., Oberlin, 1922. Radicalism in the United States, 1783-1800. 1940. *Chicago.*

HUGH SAGER MEAD, A.B., Chicago, 1900. The economic development of the Philippine Islands during the American administrations. 1940. *Chicago.*

FREDERIC K. MILLER. Economic development of Lebanon County, Pennsylvania, to the Civil War. *Pennsylvania.*

MILDRED BUZEK OTENASEK, Ph.D., Johns Hopkins, 1939. Financial policies of Alexander Hamilton. Accepted.

W. R. REESE, A.B., Illinois, 1932; A.M., 1933. The tithe controversy in the Tudor-Stuart period. 1940. *Chicago.*

JOSEPH REED ROUTTEN, B.S., Mississippi State, 1912; M.A., George Washington, 1935. German interest in Latin America prior to the World War, 1898-1914. 1941. *American.*

THOMAS HARVEY SMITH, B.A., Columbia, 1922; B.A., Harvard, 1924. A qualitative and quantitative study of recovery in Great Britain and the United States since 1929. 1940. *Wisconsin.*

WILLIAM ALFRED SPURR, Ph.D., Columbia, 1940. Seasonal variations in the economic activities of Japan. (Published by University Studies, University of Nebraska.)

MAXINE YAPLE SWEEZY, Ph.D., Radcliffe, 1940. Nazi economic policies. Accepted.

C. B. WORTHEN, B.E., Washington, 1920; A.M., 1928. History of central Montana. 1940. *Chicago.*

Agriculture, Mining, Forestry, and Fisheries

MARTIN A. ABRAHAMSON, Ph.D., Wisconsin, 1940. Coöperative purchasing of farm supplies in West Virginia. Accepted.

IRA W. ARTHUR, Ph.D., Minnesota, 1939. Public regulation of monopolistic practices in the American livestock and wholesale meat trades (economic objectives and consequences). Accepted.

H. WAYNE BITTING, B.S., Illinois, 1933; M.S., Iowa State, 1937. The livestock market structure and its relation to price. 1941. *Minnesota.*

RICHARD T. BOHAN, Ph.D., Michigan, 1940. Effect of the Mexican agrarian revolution, 1910-1920, on agricultural production. Accepted.

RAYMOND T. BURDICK, B.S., Cornell, 1912; M.S., Colorado State College of Agriculture and Mechanic Arts, 1922. A consideration of the effect of different combinations of enterprises upon net profits from irrigated farming in northern Colorado. 1940. *Chicago.*

FRANKLIN WICHER BURTON, B.A., Toronto, 1930; A.M., Harvard, 1933. The Canadian grain trade. 1940. *Toronto.*

ROBERT MARION CLAWSON, B.S., Nevada, 1926; M.S., 1929. Economic organization of the range livestock industry of the United States. *Harvard.*

GLENN HORACE CRAIG, B.A., Alberta, 1930; M.A., McGill, 1933. Land utilization in the arid plains of western Canada. *Harvard.*

CLARENCE H. DANHOF, Ph.D., Michigan, 1939. The agricultural system of production in the United States. Accepted.

PHIL ECKERT, B.S., Ohio State, 1934; M.S., 1936. Short-term loans to farmers by Ohio commercial banks. 1941. *Ohio State.*

ROBERT J. EGGERT, B.S., Illinois, 1935; M.S., 1936. Study of cold storage lockers in Minnesota. 1941. *Minnesota.*

ELMO W. EKE, B.Ed., Milwaukee State Teachers, 1935. Directional measures for land utilization in the United States. 1941. *Wisconsin.*

SELMER A. ENGENE, B.S., Minnesota, 1931. An analysis of the relative ranking of management factors to farm earnings. 1940. *Minnesota.*

JAMES GILBERT EVANS, A.B., Simpson, 1921; A.M., Illinois, 1924. American agricultural export policies, 1839-1939. 1940. *Chicago.*

E. BLAND FAIRCLOTH, B.S., Virginia, 1939; M.A., Chicago, 1939. A history of the stockyards of Chicago. 1940. *Chicago.*

ALFRED DAVID FOLWEILER, B.S., Penn State, 1925; M.S., Yale, 1931. Tenure as an influence on forest land use in the deep south. 1941. *Wisconsin.*

RUDOLPH K. FROKER, B.S., Minnesota, 1925; M.A., 1927. Large-scale organization in the dairy industry. 1941. *Minnesota.*

LEVI VARDEN FULLER, A.B., California, 1934. The supply of agricultural labor in the evolution of farm organization in California. 1939. *California.* Accepted.

JOHN LEONARD FULMER, Ph.D., Virginia, 1939. An economic analysis of entrepreneurship in cotton production and the effect of shifting risk on income expectancies. Accepted.

PORTER L. GADDIS, B.S., Nebraska, 1916; M.A., 1920. The principles of agricultural real estate valuation. 1940. *American.* Accepted.

WILFRED JOSEPH GARVIN, A.B., St. Francis Xavier, 1934; A.M., Catholic, 1935. Some factors affecting the production of milk and its products and their relation to the apparent consumption in Nova Scotia. *Catholic.* Completed.

JACOB BARNARD GIBBS, B.S. Agric., Missouri, 1924; A.M., Columbia, 1930. Tobacco production and consumption in Asia. 1941. *Columbia.*

WILLIAM GILOANE. Credit facilities for farmers' coöperatives. 1941. *Johns Hopkins.*

JACK GOTTSEGEN, Ph.D., Columbia, 1940. Tobacco—a study of its consumption in the United States. (Privately printed.)

PERCY LOVE GUYTON, B.S., Mississippi State, 1927; M.B.A., Northwestern, 1932. Federal aid to American agriculture. 1941. *Duke.*

ORVILLE J. HALL, B.S., Arkansas, 1925; M.S., Minnesota, 1928. An economic study of rice production in Arkansas. 1941. *Minnesota.*

GEORGE VICKERS HAYTHORNE, A.B., Alberta, 1930; A.M., 1932. Agriculture and the farm worker: an analysis of labour in farming based on a study of eastern Canada. *Harvard.*

LOUIS F. HERRMANN, B.S., Michigan State, 1932; M.S., West Virginia, 1934. The economy of feeding dairy herds in West Virginia. 1941. *Minnesota.*

JAMES CHRISTIAN HILL, A.B., Swarthmore, 1935. Planning and rehabilitation in the cotton belt, with emphasis on coöperative farming and tenancy. 1941. *Columbia.*

HAROLD F. HOLLANDS, Ph.D., Minnesota, 1939. An economic study of reclamation projects in central Washington, with particular reference to plans for repayment of construction costs. Accepted.

SIDNEY SAMUELS HOOS, A.B., Michigan, 1934; A.M., 1935. Price relations between December and March wheat futures at Liverpool. 1939. *Stanford.* Accepted.

CHING-YUEN HSIANG, B.A., Tsing Hua, China, 1934. An outline of China's land problems and policies. 1940. *Wisconsin.*

STUART M. JAMIESON, A.B., British Columbia, 1935; M.A., McGill, 1938. History of agricultural labor organization in California. 1941. *California.*

HORACE RICHARD JOSEPHSON, B.S., Pennsylvania State, 1932; M.S., California, 1933. Factors affecting costs and returns of timber production in second growth pine stands of the Sierra Nevada foothills. 1939. *California.* Accepted.

LOWRY B. KARNES, A.B., Muskingum; M.A., Ohio State. The agricultural geography of the corn and winter wheat belt. 1940. *Ohio State.*

LAWRENCE ELLIOTT KINDT, B.S., Alberta, 1927; M.A., Minnesota, 1930. The sheep ranching industry in western Canada. 1940. *American.* Accepted.

ARLOWE L. LARSON, B.S., M.S., South Dakota, 1934. The analysis of operations of cooperative elevators in Oklahoma. 1941. *Wisconsin.*

BARNES F. LATHROP, B.A., Rice, 1930; M.A., Chicago, 1931. The Pugh plantations on Bayou Lafourche, Louisiana. 1940. *Chicago.*

JOHN L. LILES, JR., B.S., Alabama Polytechnic, 1936; M.S., Illinois, 1937. Problems in marketing base milk in Alabama. 1941. *Wisconsin.*

WLADIMER LIWSCHITZ-GARIK, Berlin and Zurich. Characteristic features of the development of central European agriculture. 1940. *Pittsburgh.*

DAVID L. MACFARLANE, B.S., Saskatchewan, 1933; M.S., 1934. A critical examination of the sampling methods used in government crop estimates in Canada. 1941. *Minnesota.*

DONALD FRANCIS MCMILLEN, B.S., Illinois, 1936; M.S., California, 1937. An economic analysis of marketing control plans used in the canning cling peach industry of California. 1941. *California.*

JOHN GORDON MCNEELY, B.S., South Dakota, 1933; M.S., 1934. Tenancy in Arkansas. 1941. *Wisconsin.*

CARL H. MONSEES, A.B., Roanoke, 1922; A.M., Pennsylvania, 1925. The federal government's procedure in planning, constructing, and operating communities for resettlement purposes. 1941. *American.*

IRA W. MOOMAW, Ph.D., Ohio State, 1940. Farm organization and certain aspects of life on 192 backward class farms in Broach District, India.

WILLIAM F. MUSBACH, B.S., William and Mary, 1935. A critical analysis of concepts and methods of land classification used in the United States. 1941. *Wisconsin.*

N. EASTIN NELSON, B.A., Stephen F. Austin, 1928; M.A., Texas, 1929. The oil industry of the Republic of Mexico. 1941. *Texas.*

THEODORE NORMAN, Ph.D., Harvard, 1939. The Federal Farm Board. Accepted.

PATRICK EDWARD O'DONNELL, B.S., Massachusetts State, 1932. Analysis of the organization of the Chicago milk market, with emphasis on problems of distribution. *Harvard.*

OTIS T. OSGOOD, B.A., Arkansas, 1931; M.S., Minnesota, 1938. Farm organizations for upland areas in the eastern Ozarks. 1942. *Minnesota.*

RAYMOND J. PENN, B.E., River Falls State Teachers, 1932. The history and policies of the South Dakota rural credit board. 1941. *Wisconsin.*

CLARENCE EDWARD PHILBROOK, A.B., Chicago, 1936. The economics of conservation of natural resources. 1940. *Chicago.*

CARROLL D. PHILLIPS, B.S., Colorado, 1923; M.S.A., Purdue, 1928. The organization of the wholesale fruit and vegetable market of Louisville, Kentucky. 1940. *Minnesota.*

ROY E. PROCTOR, B.S., Kentucky, 1927; M.S., 1930. Factors affecting changes in farm organization in a general livestock area in Kentucky, 1926 to 1939. 1941. *Minnesota.*

WILLARD P. RANNEY, Ph.D., Minnesota, 1939. An analysis of the selection and use of factors affecting the earnings of dairy farmers in southeastern Minnesota. Accepted.

ARTHUR H. REDFIELD, A.B., George Washington, 1913; M.S., 1925. Alien oil: a study of immigrant capital and immigrant petroleum with special reference to the United States. 1941. *American.*

J. WAYNE REITZ, B.S., Colorado, 1930; M.S., Illinois, 1935. A study of production credit problems of citrus fruit and vegetable growers in Florida. 1941. *Wisconsin.*

Elmer L. Sauer, B.S., Illinois, 1931; M.S., 1934. Some economic aspects of soil conservation in Illinois; a study to determine the economic and social effects on farms resulting from the operation of a definitely planned program of soil and water conservation. 1941. *Illinois.*

John B. Schneider, Ph.D., California, 1940. The California tomato industry with special reference to marketing. Accepted.

Henry W. Spiegel, Ph.D., Wisconsin, 1939. Contemporary land tenure policies at home and abroad. Accepted.

James M. Stepp, B.A., Berea, 1937; M.A., Virginia, 1938. Theory of milk marketing. 1940. *Virginia.* Accepted.

Thomas Noel Stern, A.B., Swarthmore, 1934; A.M., Pennsylvania, 1940. Community forests in Pennsylvania. 1941. *Pennsylvania.*

Hadley Van Vliet, B.S.A., Saskatchewan, 1934; M.S., 1936. An analysis of agricultural land tenure in Saskatchewan. 1942. *Wisconsin.*

Paul P. Wallrabenstein, B.S., Ohio State, 1931. Accuracy and reliability of county estimates of yield per acre in Ohio. 1940. *Ohio State.*

Charles J. Walsh, B.A., M.A., Fordham. International aspects of cotton control. 1940. *Fordham.* Accepted.

W. Neal Waterstreet, B.S., Northwestern, 1931; M.S., Wisconsin, 1932. Flexibility in the operation of milk plants. 1941. *Wisconsin.*

Everett Carl Weitzell, B.S., Maryland, 1934; M.S., 1935. The economics of soil conservation in West Virginia. 1941. *Wisconsin.*

Bayard O. Wheeler, A.B., California, 1928; M.S., University of Washington, 1930. The Douglas fir industry in the Pacific Northwest. 1940. *California.*

John W. White, B.S., Arkansas, 1935; M.S., Minnesota, 1939. Economic changes in cotton production from 1929 to 1939, with particular reference to the Pine Bluff area in Arkansas. 1942. *Minnesota.*

William Tate Whitman, A.B., Duke, 1929; M.A., 1933. The potential volume of employment in forest industries of the Southeast under conditions of optimum utilization. 1942. *Duke.*

Ramey C. Witney, B.S., Nebraska, 1931; M.A., 1936. An economic study of possible improvements in farming on the dryland plains of Colorado. 1941. *Minnesota.*

Thomas B. Worsley, B.S., Virginia, 1933; M.S., 1934. The effect of governmental action on cotton prices in the southern states. 1941. *Virginia.*

Shu Chia Yang, B.A., Central Political Institute, Nanking, China, 1933; M.S., Minnesota, 1939. A study of a satisfactory farm credit system for China: its nature and requirements. 1941. *Minnesota.*

Mohammed Monir El Zalaki, B.S., Cairo, Egypt, 1931; B.S., California, 1934. The influence of significant economic, institutional and physical factors on the composition and functioning of Egyptian agriculture. 1940. *California.*

Manufacturing Industries

Clark Lee Allen, A.B., McKendree, 1932; M.A., Washington University, 1938. Effects of utilization of synthetic fibers upon the organization of the southern textile industry. 1942. *Duke.*

Jeannette Marie Amidon, A.B., Puget Sound, 1935; A.M., 1937. Marketing of quick-frozen foods. 1940. *Chicago.*

Edgar S. Bagley, B.A., California, 1935; M.A., 1936. Federal policies since 1933 with reference to competitive relationships of industrial organizations. 1940. *Iowa.*

George Dewalt Bieber, B.S., Franklin and Marshall, 1937; M.A., Pittsburgh, 1940. The competitive position of the various textile fibers. 1941. *Pittsburgh.*

Chen-han Chen, Ph.D., Harvard, 1940. The location of the cotton-manufacturing industry in the United States, 1880-1910. Accepted.

Eileen M. Conly, A.B., Brooklyn, 1934; A.M., Columbia, 1935. Changing character of the silk industry in Paterson, New Jersey. 1941. *Columbia.*

BERNARD DRELL, Ph.D., Chicago, 1939. The rôle of the Goodman Manufacturing Company in the mechanization of coal mining. Accepted.

ROBERT ERNST, A.B., Columbia, 1936; A.M., Brown, 1937. The National Association of Manufacturers. 1941. *Columbia.*

ISAIAH FINKELSTEIN, B.S.S., College of the City of New York, 1936; M.A., Columbia, 1938. War and the growth of industries. 1941. *Columbia.*

E. C. GRIFFITH, A.B., Hampden-Sydney, 1936; M.A., Virginia, 1939. Some aspects of the economic relations between the tin plate, tin can, and canning industries in Virginia. 1940. *Virginia.*

JAMES A. HART, B.S., M.A., Fordham. Industrial emigration from Chicago. *Fordham.* Accepted.

AUSTIN CLAIR HOFFMAN, Ph.D., Harvard, 1939. Large-scale organization in the food industries. Accepted.

HIRSCHEL F. JONES, B.A., Antioch, 1931; M.A., Nebraska, 1937. The policy of the federal government and its agencies regarding the integration of power resources in the United States. 1941. *Wisconsin.*

WILLIAM NORRIS LEONARD, A.B., Virginia, 1936; A.M., Texas, 1938. Economics of aircraft production. 1941. *Columbia.*

GORDON CARROLL LOSEE, B.S., Illinois, 1931; M.S., 1936. Reorganization of the electric power industry into regional systems. 1940. *Illinois.*

MYER LYNSKY, B.S., Massachusetts State. The United States sugar industry. 1941. *Columbia.*

CARL WILBURN MCGUIRE, Ph.D., Missouri, 1939. Economics of the community bonus, with special reference to the Missouri boot and shoe industry. Completed.

THEODORE FRANCIS MARBURG, A.B., Antioch, 1936; A.M., Clark, 1937. The brass industry as typified by a case study. 1941. *Clark.*

DONALD FRASER MARTIN, A.B., Davidson, 1929; A.M., North Carolina, 1932. The economics of the naval stores industry. 1940. *North Carolina.*

OLIN TERRILL MOUZON, B.S., Southern Methodist, 1933. Recent developments in the southern pulp and paper industries and their economic and social implications. 1940. *North Carolina.*

CYRIL O'DONNELL, B.C., Alberta, 1924; A.M., 1926. Recent trends in the consumption of textile fibers with special reference to cotton. 1940. *Chicago.*

RAYBURN DEAN TOUSLEY, B.S., Missouri, 1931; M.A., 1933. Price stabilization in the petroleum industry since 1930. 1941. *Northwestern.*

MELVILLE H. WALKER, Ph.D., California, 1940. Manufacturers' guilds (kogwo kumiai) in Japanese small-scale industries. Completed.

JOHN H. WESTING, A.B., Calvin, 1932; M.B.A., Michigan, 1935. Marketing problems in the sugar refining industry. 1941. *Michigan.*

CONSTANCE WILLIAMS, A.B., Vassar, 1930; M.S., Simmons, 1931. Adjustment to industrial change in four Massachusetts textile cities. 1940. *Chicago.*

JAMES E. WOOD, A.B., College of the Pacific, 1929. The changing character of the broad silk industry in Paterson, New Jersey, and its effects on the security of the workers in the industry. 1940. *California.*

PAUL N. WOOLF, Ph.D., California, 1939. A historical appraisal of the flour milling industry in California.

Transportation and Communication

A. B. ARMSTRONG. A history of the Texas and Pacific Railroad. *Washington University.*

GEORGE R. ANDERSON, A.B., Northern State Teachers; A.M., Michigan, 1934. Effects of rigid public utility rates in depression. 1942. *Michigan.*

JAMES CYRIL DICKSON BLAINE, B.Com., Queens, 1934; M.S., North Carolina, 1939. The economics of airways transportation. 1941. *North Carolina.*

EDWARD ANDREW BRAND, Ph.D., Iowa, 1939. The development of regulation of commercial highway traffic with particular emphasis on the federal aspect.

JAMES WHITNEY BUNTING, B.S., Pennsylvania, 1934; A.M., 1936; M.B.A., 1937. Economic theory and development of railroad distance rate scales. 1941. *Pennsylvania.*

WILLIAM F. BUTLER, B.A., Cornell, 1937. Some aspects of the governmental power policy in the Tennessee Valley. 1941. *Virginia.*

DONALD E. CHURCH, Ph.D., Michigan, 1939. Integrations of rail and motor carriers under the motor carrier act. Accepted.

JOHN MOWBRAY CRAWFORD, A.B., Reed, 1935. Railroad reorganization with special reference to problems of valuation under the Chandler act. 1941. *Cornell.*

ROGER COIT DIXON, A.B., Princeton, 1936. The position of the freight forwarders in the transportation field. 1941. *Princeton.*

THOMAS WILLIAMS DOUGLAS, Ph.D., Pennsylvania, 1939. Freight rates on rice: an analysis of commodity rate structure. (Published by Times and News Publishing Company, Gettysburg, Pennsylvania, 1939.)

HUGH NORMAN EMERSON, A.B., Johns Hopkins, 1930; M.B.A., Pennsylvania, 1932. The position of the railroads as petroleum carriers. 1941. *Pennsylvania.*

CLARENCE EDGAR HEFFELFINGER, A.B., Ursinus, 1920; M.S., Columbia, 1931. Transportation and the development of modern China. 1942. *Columbia.*

AUGUSTUS BYRON HILL, B.A., Vanderbilt, 1928; LL.B., Harvard, 1931. Some aspects of the southern problem of railroad freight rate differentials. *Vanderbilt.*

REGINALD VYVYAN HOBBAH, B.S., Pittsburgh, 1931. The legal and economic aspects of railroad transit privileges. 1940. *Chicago.*

WILLIAM HARRY JOUBERT, B.S., Florida, 1933; M.S., 1935. A history of the Seaboard Airline Railway Company. 1942. *North Carolina.*

HAROLD KELSO, B.A., Kansas, 1930; M.A., Wisconsin, 1935. Renascent waterways. 1940. *Wisconsin.*

EZEKIEL LIMMER, B.A., Brown, 1933; M.A., Columbia, 1934. Minimum rate regulation by the Interstate Commerce Commission. 1941. *American.*

TA-CHUNG LIU, Tanshan College of Chiaotung University, 1936. A study in railroad rate-making. 1940. *Cornell.*

DEOTIS LORING MARLETT, B.A., M.A., Wisconsin, 1934. A critical analysis of control of retail electric rates and financial practices of distributing agencies purchasing power from federal hydroelectric projects. 1941. *Northwestern.*

WILLIAM PARDRIDGE. The development of commercial aviation in Latin America. 1940. *Chicago.*

CLAUDE E. PUFFER, B.B.A., University of Washington, 1933. Federal regulation of commercial aviation. 1940. *Stanford.*

CHARLES STUART SHELDON, II, A.B., University of Washington, 1936; A.M., 1938. The Japanese shipping industry. An analysis of some phases of the industry in relation to national economic rivalry. *Harvard.*

PAUL B. SIMPSON, B.S., Reed, 1936. Economics of rate making under government ownership of the railroads. 1941. *Cornell.*

HAMPTON K. SNELL, B.A., Wisconsin, 1925; M.A., 1928. The fourth section of the interstate commerce act and its application in the Pacific Coast. 1941. *Yale.*

FRANCIS AUTEN SPENCER, B.S., Northwestern, 1936; A.M., Princeton, 1938. Control of air mail compensation by the Interstate Commerce Commission. 1940. *Princeton.*

HERBERT SPERO, Ph.D., Columbia, 1940. Reconstruction Finance Corporation loans to the railroads. (Published by Bankers Publishing Company, 1939.)

WILLIAM WAY, JR., A.B., North Carolina, 1926; A.M., 1929. Railroad passenger fares and services. 1941. *Pennsylvania.*

Trade, Commerce, and Commercial Crises

ABDUL-MAJID ABBASS, Ph.D., Chicago, 1939. Oil diplomacy in the Near East. Accepted.

ARMEN ALCHIAN, A.B., Stanford, 1936. Money-wage rates and cyclical variations. 1942. *Stanford.*

CARL TRISTAN ARLT, A.B., Colgate, 1933. Intra-state discriminatory barriers to trade. 1940. *Cornell.*

MARGARET LOUISA BALLARD, Ph.D., Radcliffe, 1939. The Federal Trade Commission and misrepresentation. Accepted.

W. T. M. Beale, A.B., Princeton, 1931; M.B.A., Pennsylvania, 1933. British protective policy, 1931-1939. 1941. *Pennsylvania.*

Grace L. Beckett, Ph.D., Ohio State, 1939. The reciprocal trade agreement program of the United States. Accepted.

Alice E. Bourneuf, A.B., Radcliffe, 1933; A.M., 1939. Belgian international trade since the war, with special reference to the terms of trade. *Harvard.*

Charles B. Bream, A.B., Midland, 1936; A.M., Chicago, 1939. Relations of the United States and Latin America in respect to the munitions trade. 1940. *Chicago.*

George Hay Brown, A.B., Oberlin, 1929; M.B.A., Harvard, 1931. The economic position of New Zealand. 1940. *Chicago.*

Benjamin H. Brown, A.B., Columbia, 1937; Cambridge, 1939. A history of the fair trade movement. 1941. *Columbia.*

Charles C. Center, B.S., Knox, 1932; M.A., Wisconsin, 1938. Theory of risk and insurance in relation to the business cycle. 1941. *Wisconsin.*

O. E. Dille, B.S., M.A., Ohio State. The wholesale trade of Knoxville, Tennessee. 1941. *Ohio State.*

Ernest John Engquist, B.A., Lawrence, 1929; M.A., Illinois, 1931. The business cycle: a problem of electrical utilities. 1939. *Northwestern.* Accepted.

Howard Naylor Fitzhugh, B.S., Harvard, 1930; M.B.A., 1933. The feasibility of consumers' coöperatives as a device for economic self-help and small business enterprise. 1941. *Columbia.*

Siegfried Garbuny, Diplomvolkswirt, Berlin, 1936. The reciprocal trade agreement program of the United States. 1941. *Columbia.*

Burton Crosby Hallowell, A.B., Wesleyan, 1936; A.M., 1938. International capital movements and business fluctuations. 1941. *Princeton.*

Claude Edward Hawley, Ph.D., Chicago, 1939. The Illinois Commerce Commission: a study in administrative regulation. Accepted.

Victor Crawford Heck, B.S., California, 1936; M.A., 1937. Anglo-American-German trade relations in Mexico in the post-war period. 1941. *Cornell.*

Richard Hellman, A.B., Columbia, 1934. Regulation by government competition. 1941. *Columbia.*

Douglas James, B.S., Princeton, 1929; A.M., Columbia, 1931. The commercial relations of the Levant with western Europe, 1815-1869. 1941. *Columbia.*

Alfred E. Kahn, B.A., New York, 1936; M.A., 1937. Effects of the international position of Great Britain, 1919-1939. 1941. *Yale.*

Frank LeRoy Kidner, A.B., California, 1938. A study of California business cycles, 1918-1938. 1941. *Columbia.*

Carl Jonas Kreider, A.B., Goshen, 1936; A.M., Princeton, 1938. The Anglo-American trade agreement. 1940. *Princeton.*

C. S. Logsdon, B.A., Georgetown; M.A., Ohio State. Interstate barriers to trade. 1940. *Ohio State.*

Charles A. Matthews, B.S., Washington and Lee, 1937; M.A., Virginia. Fiscal barriers in interstate commerce. 1941. *Virginia.*

John Melby, A.B., Illinois Wesleyan, 1934; A.M., Chicago, 1936. The economic relations for the United States and Brazil. 1940. *Chicago.*

Harry A. Mitchell, A.B., Michigan, 1925; M.B.A., 1926. New Orleans as a wholesale center. 1941. *Michigan.*

Jacob Louis Mosak, A.B., Chicago, 1935. International aspects of the business cycle. 1940. *Chicago.*

Thomas E. Murphy, B.S., New York, 1934; M.A. Cycles in diseases. 1941. *New York.*

Charles A. Orr, Ph.D., Michigan, 1940. A study of Indian boycotts. Accepted.

Ernest L. Osborne, Ph.B., Yale, 1912; B.S., Massachusetts Institute of Technology, 1914. South American trade cycles. 1942. *Columbia.*

Alfred Richard Oxenfeldt, B.S., Pennsylvania, 1937; A.M., Columbia, 1938. The conditions surrounding and the effects of the establishment of new firms. 1941. *Columbia.*

William B. Palmer, A.B., Michigan, 1929; A.M., 1930. Post-war American capital movements and the trade cycle. 1941. *Michigan.*

DIMETRIUS CONSTANTINE PANIPOULOS, B.S., Robert College, Constantinople, 1932; A.M., Catholic, 1935. Some indications of the effectiveness of the American Reciprocal Trade Agreement Program, 1934-1939. *Catholic.* Completed.

JAMES W. PAUL, B.S., S.T.C., Troy (Alabama), 1932; B.D., M.A., Southern Methodist, 1935. Trade and politics in Palestine during the bronze age. 1940. *Chicago.*

JOHN ADAMS PFANNER, JR., Ph.D., Chicago, 1939. Drawing pcwer of ninety cities for retail trade. Accepted.

ALAN POPE, A.B., Columbia, 1935. The problems of causation in business cycle analysis. 1941. *Columbia.*

ALICE J. REYNOLDS, A.B., Goucher, 1929. The Port of Baltimore. 1940. *Johns Hopkins.*

WALT W. ROSTOW, B.A., Yale, 1936; B.Litt., Oxford, 1938. British trade fluctuations, 1868-1896: a chronicle and a commentary. 1940. *Yale.* Accepted.

ORVIS ADRIAN SCHMIDT, A.B., Lawrence, 1933; A.M., Tufts, 1935 The economic development of Brazil. 1940. *Chicago.*

E. D. W. SPINGARN, A.B., Bowdoin, 1935; A.M., Harvard, 1934. Equilibrium analysis and international trade. *Harvard.*

HERBERT STEIN, A.B., Williams, 1935. Relation between wage and price rigidities in the business cycle. 1940. *Chicago.*

EDWARD A. STONE, A.B., Michigan, 1936; A.M., 1940. The annual interregional balance of payments on a county basis. 1941. *Michigan.*

DAN RUTLEDGE VINING, B.B.A., Texas, 1931; M.A., 1935. Regicnal studies of economic expansion and of the propagation of business cycles. 1940. *Chicago.*

HUGH GREGORY WALES, A.B., Washburn, 1932; M.B.A., Harvard, 1934. The Kansas City fruit and vegetable market. 1941. *Northwestern.*

LOUISE D. WALKER, A.B., Smith, 1926; A.M., Chicago, 1930. A history of the Chicago Association of Commerce. 1940. *Chicago.*

THOMAS F. WIESEN, B.S., Texas Agricultural and Mechanical, 1920; M.B.A., Pennsylvania, 1935. Japanese competition in the foreign markets of the United States. 1941. *Pennsylvania.*

Accounting, Business Methods, Investments, and the Exchanges

RAYMOND KING ADAMSON, B.A., Wisconsin, 1932. The transition from free to controlled exchanges and their effect upon trade, production, and productivity. 1940. *Wisconsin.*

JOSEPH LOUIS APODACA, B.A., Notre Dame, 1930; M.B.A., Northwestern, 1933. Some aspects of the advertisability of selected fruits and vegetables. 1940. *Northwestern.*

HERBERT ARKIN, Ph.D., Columbia, 1940. A statistical analysis of the internal factors affecting the yield of domestic corporate bonds. (Published privately.)

HAROLD G. AVERY, Ph.D., Columbia, 1940. Accounting for depreciable fixed assets.

ELEANOR SAUER BAGLEY, A.B., Mount Holyoke, 1936; A.M., Columbia, 1937. Control of the investment market. 1941. *Columbia.*

HAROLD A. BAKER, B.C.S., New York, 1918; B.S., 1930; A.M., Fordham, 1939. Investment outlets in privately owned public utilities. 1940. *Fordham.*

HAROLD BRUSS BAKER, A.B., Heidelberg, 1931; M.B.A., Northwestern, 1932. Tobacco marketing coöperatives in the Miami Valley, Ohio. 1940. *Northwestern.*

R. D. W. BARTELS, B.S., Ohio State; M.B.A., Northwestern. The development of marketing theory. 1941. *Ohio State.*

NORBERT G. BAUSCH, B.S., Creighton, 1932; M.S., Illinois, 1933. The relation between accounting and certain recent developments in the statutory law of business corporations. 1940. *Illinois.*

G. MAX BEAL, B.S., Utah State; M.S., Wisconsin, 1938. Contractual relations between growers and canners in the sale of cash crops. 1941. *Wisconsin.*

CARL F. BEHRENS, B.S. Agric., Michigan State, 1923; M.S. Agric., Iowa State, 1924. Changes in mortgage financing. 1942. *Michigan.*

H. H. BENEKE, A.B., Miami; A.M., Chicago. Corporate stock characteristics. 1941. *Ohio State.*

JACOB J. BLAIR, A.B., Cincinnati, 1924; A.M., Pennsylvania, 1929. An evaluation of the methods used to set output standards in the plants of the Pittsburgh district. 1941. *Pennsylvania.*

FRANK BOURGIN, A.B., Minnesota, 1930; A.M., Claremont, 1932. The history of regional planning in the United States. 1940. *Chicago.*

VICTOR Z. BRINK, Ph.D., Columbia, 1940. Internal auditing policy.

CLAIRE BROWN, A.B., Adelphi, 1935; M.S., New York, 1936. Resale price maintenance. 1941. *Columbia.*

HORACE BRIGHTBERRY BROWN, JR., B.S.C., Mississippi, 1931; M.B.A., Northwestern, 1932. The development and the present status of the coöperative marketing of cotton in the state of Mississippi. 1941. *Northwestern.*

WILLIAM FRANCIS BROWN, JR., B.A., California at Los Angeles, 1933; M.A., 1934. Department store market analysis. 1941. *Northwestern.*

LENNARD G. BRYNGELSSON, B.S., Knox, 1924; M.B.A., Northwestern, 1931. A survey of consumer coöperatives in relation to their accounting practices. 1940. *Columbia.*

LESLIE J. BUCHAN, B.S., Illinois, 1922; M.S., 1923. A critical analysis of certain formulations of accounting principles. 1940. *Illinois.*

WILLIAM ROY BUCKWALTER, B.S., Pennsylvania, 1929; M.A., 1932. Regulation of public utility valuation for rate making in Pennsylvania. 1940. *Pennsylvania.*

ARLEIGH ROY BURTON, B.S., Kansas State Teachers, 1927; M.S., 1935. Accounting for inventories in the business cycle. 1941. *Nebraska.*

WILLIAM E. CAMPBELL, B.S., Illinois, 1928; M.S., 1932. Educational preparation for professional accounting. 1941. *Illinois.*

JAMES M. CARRITHERS, A.B., Coe College, 1936; M.S., Iowa, 1937. The nature of the business transaction. 1941. *Illinois.*

THOMAS GREGORY CHARTERS, A.B., Manhattan, 1927; M.A., Canisius, 1929. Financial statements. 1941. *Columbia.*

HOMER CHERRINGTON, A.B., Ohio University, 1914; A.M., Harvard, 1922. The securities act. 1940. *Harvard.*

OTHEL J. CURRY, Ph.D., Michigan, 1939. The utilization of corporate earnings, 1922-36. Accepted.

JAMES W. DAVAULT, Ph.D., Columbia, 1940. Accounting for farm costs—a theoretical approach. (Published privately.)

CARL T. DEVINE, B.S., Davis and Elkins, 1935; M.B.A., Michigan, 1938. Inventory valuation and business income. 1940. *Michigan.*

ROBERT L. DIXON, B.A., Michigan, 1930; M.B.A., 1931. The income statement. 1941. *Yale.*

VIOLA MAUDE DU FRAIN, A.B., Illinois, 1924; A.M., Chicago, 1933. Positive acceleration of the so-called normal learning curve in typewriting. 1940. *Chicago.*

ROBERT PARKER EASTWOOD, B.S., Nebraska, 1922; M.A., 1923. The use of quantitative methods in the control of sales. 1940. *Columbia.* Accepted.

RAYMOND EINHORN, B.S., Florida, 1935; M.S., Illinois, 1937. Background of financial policy in the declaration of dividends. 1941. *Illinois.*

DONALD J. EMBLEN, A.B., Ohio State, 1932; M.B.A., Pennsylvania, 1935. Competitive bidding for corporate issues by investment bankers. 1941. *Columbia.*

WALTER ATHERTON FOY, Ph.B., Yale, 1925; M.B.A., Northwestern, 1934. Corporation bond price and fluctuations and commercial bank investment policy. 1940. *Northwestern.* Accepted.

HAROLD A. FREY, B.A., Wisconsin, 1923; M.A., 1925. Basic market analysis of a selected commercial area. 1941. *Wisconsin.*

CHARLES J. GAA, B.S., Illinois, 1932; M.S., 1936. Divergences from good accounting practice required by the federal income tax law. 1940. *Illinois.*

RAYMOND E. GLOS, Ph.D., Ohio State, 1939. Capital stock write downs. Accepted.

LEE GLOVER, B.S., A.B., Alabama, 1922; A.M., Chicago, 1928. Fixed and variable costs and their application in cost analysis. 1942. *Columbia.*

HAROLD M. HAAS, B.S. in M.E., Purdue, 1911; M.B.A., University of Washington, 1930. Social and economic aspects of the chain-store movement. 1939. *Minnesota.* Completed.

JAY G. HALL, A.B., Western Ontario, 1934. A history of Marshall Field and Company. 1940. *Chicago.*

LOUIS FREDERICK HAMPEL, B.S. in Comm., Akron, 1930; M.B.A., Northwestern, 1931. Some supply and demand factors in high grade bond yields. 1940. *Northwestern.*

GOULD LEACH HARRIS, A.B., Ohio State, 1914; A.M., 1916. Marketing costs. 1941. *Columbia.*

ROLAND F. HARTMAN, B.S., Lehigh, 1928; M.A., 1933. Financial development of the Electric Bond and Share Company. 1941. *Columbia.*

T. KENNETH HAVEN, Ph.D., Michigan, 1940. Investment banking under the Securities and Exchange Commission. Accepted.

NORMAN S. HEANEY, B.S. in Econ., Johns Hopkins, 1934. The public trustee. 1941. *Johns Hopkins.*

MALCOLM FARNSWORTH HESLIP, B.S., Illinois, 1923; M.S., 1932; A study of management's procedure in marketing electric service, 1882-1939. 1940. *Southern California.*

LELAND HESS, A.B., Ripon, 1938. A study of the mail order business. 1940. *Chicago.*

GEORGE B. HURFF, A.B., Pennsylvania, 1927. The locus of entrepreneurship in large corporations. 1941. *Pennsylvania.*

KENNETH DOUGLASS HUTCHINSON, Ph.D., Harvard, 1939. The economic aspects of industrial imitation in styled goods. Accepted.

C. J. HYNNING, A.B., Chicago, 1934; J.D., Kent Law, 1934. Trends in state resources planning. 1940. *Chicago.*

H. W. JOHNSON, B.A., M.B.A., Michigan. Marketing of laboratory equipment and supplies. 1941. *Ohio State.*

THOMAS F. JONES, B.S., Ohio State; M.A., Columbia. Buying practices in the smaller department stores. 1941. *Ohio State.*

EDWARD JOHN KELLY, B.S., California, 1924. Basic hospitalization costs. 1940. *Stanford.*

EDWARD J. KIRKHAM, B.S., Miami, 1934; M.S., Illinois, 1936. Changing concepts of depreciation. 1941. *Illinois.*

ALBERT RALPH KOCH, A.B., Oberlin, 1936; A.M., Columbia, 1937. Corporate capital financing and the determination of business policies. 1941. *Columbia.*

HENRY AUGUST KRIEBEL, B.S., Lehigh, 1932; A.M., 1937. The integration of the balance sheet and the income statement. 1942. *Columbia.*

THEODORE LANG, A.B., Harvard, 1917; M.B.A., 1920. Competition and cost under the Robinson-Patman act. 1941. *Columbia.*

FRANKLIN J. LEERBURGER, Ph.D., Columbia, 1940. Estimated actual depreciation of public utilities. (Published privately.)

CHARLES W. LEWIS, Vanderbilt, 1928. Criteria of efficiency in retailing. 1942. *Pennsylvania.*

EDWIN H. LEWIS, B.S. in Comm., Drexel, 1932; M.B.A., Pennsylvania, 1933. The Philadelphia wholesale trading area delimitation. 1941. *Pennsylvania.*

DANIEL LIPSKY, A.B., Columbia, 1931; M.S., 1934. A reëxamination of accounting principles and some applications with particular reference to published reports: in part, a synthesis of several controversial suggestions. 1942. *Columbia.*

JOHN A. LOFTUS, A.B., Catholic, 1936. An analysis of American management investment trust experience. 1940. *Johns Hopkins.*

ROBERT RENIC LOGAN, B.Ch.E., Arkansas, 1919; B.S. in Business, 1927; M.B.A., Northwestern, 1929. Disclosure of information under the securities act of 1933. 1939. *Northwestern.* Accepted.

DONALD R. LONGMAN, A.B., Oberlin, 1932; M.B.A., Harvard, 1934. Accounting for distribution costs. 1940. *Columbia.* Accepted.

J. W. LUCAS, B.S., M.B.A., Ohio State. Cost of operating a mercantile credit department. 1941. *Ohio State.*

REUEL I. LUND, B.A., Minnesota, 1919; A.M., Chicago, 1922. The problem of the allocation of income to accounting periods. 1940. *Minnesota.* Completed.

EDWARD THEODORE MCCORMICK, B.S., Arizona, 1931; M.S., California, 1933. An analysis of the securities act of 1933. 1940. *Duke.* Accepted.

GEORGE B. MCCOWEN, B.S., Missouri, 1921; A.M., Chicago, 1927. Logical transaction analysis. 1940. *Illinois.*

L. K. MANHART, B.A., Bowling Green State; M.A., Ohio State. Retail credit management—some case studies. 1941. *Ohio State.*

THOMAS LEROY MARTIN, Ph.D., Harvard, 1939. Some economic aspects of corporation accounting. Accepted.

RICHARD E. MOODY, B.S., Rutgers, 1925. A social and economic survey of the Platteville (Wisconsin) trade area. 1941. *Wisconsin.*

PERHAM C. NAHL, Ph.D., California, 1939. Retail trading area analysis: a description and evaluation of delineation techniques.

CARL LEROY NELSON, B.B.A., Minnesota, 1931. Sources of capital in public utilities. 1941. *Minnesota.*

OSCAR ALBERT OLSON, Ph.D., Iowa, 1939. A critical examination of the principal methods proposed for stabilizing business, 1929-1939.

LEO F. PHILLIPS, B.S. in Econ., Washington and Jefferson, 1938. Investment practices and ideas as revealed by a study of the estates probated in the orphans' court of Baltimore. 1941. *Johns Hopkins.*

WILBUR K. PIERPONT, A.B., Central State Teachers, 1934; M.B.A., Michigan, 1938. Accounting for investors in the administration of the Securities and Exchange Commission. 1941. *Michigan.*

LEO ROSENBLUM, B.S., Columbia, 1926; M.S., 1927. The accounting problems underlying the adjustment of merchandise losses. 1942. *Columbia.*

CHARLES ROVETTA, Ph.B., Chicago, 1930; M.B.A., 1937. Study of hospital costs of nurses' education and value of services rendered. 1940. *Chicago.*

E. J. SHEPPARD, Ph.D., Ohio State, 1939. A history of the wholesaling of groceries and other food in central Ohio with particular reference to the city of Columbus. Accepted.

CHARLES PHILLIP SLATER, B.S., Illinois, 1928; M.S., 1936. Divergencies in the accounting concepts of cost. 1941. *Illinois.*

ROBERT LYMAN SMITH, A.B., Oberlin, 1933; A.M., 1934. Fixed asset valuations and the securities act of 1933. 1940. *Cornell.*

THEODORE H. SMITH, Ph.D., Ohio State, 1940. The marketing of used automobiles. Accepted.

WENDELL R. SMITH, B.S.C., Iowa, 1932; M.A., 1935. Iowa as a merchandise market. 1940. *Iowa.*

JOHN WESLEY STERNBERG, B.A., DePauw, 1919. Disposition of funded debt of corporations undergoing reorganization, 1918-1938. 1941. *American.*

WILLIAM E. THOMAS, B.S., Monmouth, 1936; M.S., Illinois, 1937. An evaluation of the usefulness of accounting in the preparation of a defense against charges brought under the Robinson-Patman act. 1941. *Illinois.*

MELVIN L. UPCHURCH, B.S., Texas Agricultural and Mechanical, 1936; M.S., 1937. Valuation of water rights. 1941. *Wisconsin.*

RAYMOND VERNON, A.B., College of the City of New York, 1933. Basis and aims of the regulation of stock exchange members. 1941. *Columbia.*

DONALD STOREY WARNING, A.B., Colorado, 1931; M.B.A., Northwestern, 1932. Study of the investment worth of the short-term obligations of municipal governments. 1942. *Northwestern.*

SHING YIPE WONG, B.B.A., Washington, 1929; M.S., Columbia, 1933. Accounting concepts of income. 1940. *Columbia.*

WALTER MCCAMPBELL WOOD, A.B., King, 1929. The effect of coöperative purchasing under conditions of imperfect competition. 1941. *Virginia.*

Capital and Capitalistic Organization

WYLLIS BANDLER, A.B., Columbia, 1937. The diminishing productivity of capital. 1940. *Columbia.*

JOHN WILLIAM CADMAN, JR., A.B., Buffalo, 1934; A.M., Princeton, 1937. The policy of New Jersey with respect to the business corporation. 1940. *Princeton.*

ELI W. CLEMENS, B.S. Eng., Virginia Polytechnic Institute, 1930; M.S., Illinois, 1934. Pub-

lic utility regulation in Wisconsin since the reorganization of the commission in 1931. 1940. *Wisconsin.* Completed.

PHILIP HALL COOMBS, A.B., Amherst, 1937. The causes, nature, and future of the price maintenance movement. 1940. *Chicago.*

CONRAD TULIUS FANTOZZI, Ph.B., Chicago, 1933; M.B.A., Stanford, 1935. Aspects of proposed federal economic policy with respect to the oil industry. 1940. *Chicago.*

W. LAWRENCE HEBBARD, B.S., Northern State Teachers, 1934; A.M., Michigan, 1935. International aspects of national policies relating to capital accumulation. 1942. *Michigan.*

CLIFFORD DOUGLAS JACOBS, Ph.B., Chicago, 1921. Recent tendencies in long-term corporate finance. 1940. *Chicago.*

SOLOMON JACOBSON, B.S.S., College of the City of New York, 1930; LL.B., Columbia, 1931; A.M., Brooklyn, 1938. Patent practices and the anti-trust laws. 1941. *Columbia.*

SARAH JENKINS, A.B., William Smith, 1936; A.M., Columbia, 1937. Timber monopoly in the Pacific Northwest. 1941. *Columbia.*

WILLIAM F. KENNEDY, B.A., Columbia, 1933; M.A., 1936. The regulation of service companies under the public utility holding act of 1935. 1941. *Wisconsin.*

PAUL LINCOLN KLEINSORGE, A.B., Stanford, 1927; M.B.A., Harvard, 1929. Some historical and economic aspects of the Boulder Canyon project. 1939. *Stanford.* Accepted. (To be published by Stanford University Press.)

JAMES L. KNIPE, B.A., Yale, 1926; M.A., 1934. The capital market. 1940. *Yale.* Accepted.

JOHN A. LEAVITT, B.S., Oklahoma, 1936; M.S., Columbia, 1937. Voting trust. 1942. *Columbia.*

KENNETH G. MATHESON, JR., B.S. in M.E., Georgia School of Technology, 1924. Monopoly as a cause of price rigidity. 1940. *Pennsylvania.*

ROLLAND H. MAYBEE, A.B., Columbia, 1925; A.M., 1927. Railroad competition and the rise of petroleum refining monopoly, 1862-1879. 1941. *Columbia.*

WILLIAM MILLER. A history of business corporations in New York State, 1800-1860. 1940. *Pennsylvania.*

RODERICK H. RILEY, B.A., Wisconsin, 1930; M.A., 1932. Rate policies of municipally owned electric utilities. 1941. *Wisconsin.*

ALAN L. RITTER, B.A., DePauw, 1935. A study of the flow of capital required to maintain the proper balance in our economic organization. 1941. *Wisconsin.*

JOSEPH R. ROSE, Ph.D., Pennsylvania, 1938. Public utility regulation in Pennsylvania. (Published by Times and News Publishing Company, Gettysburg, Pennsylvania, 1939.)

FLOYD R. SIMPSON, B.A., Minnesota, 1933; A.M., 1938. The development of rate making and service standards in the telephone industry. 1942. *Minnesota.*

WILLIAM H. SHAW, A.B., Columbia, 1930; A.M., 1931. Commodity flow and capital formation, 1879-1919. 1941. *Columbia.*

CHARLES THEODORE TAYLOR, B.S., Arizona, 1931; M.A., Duke, 1937. Some relationships between the size of the city and per capita governmental cost and debt. 1940. *Duke.* Accepted.

SHIGETO TSURU, A.B., Harvard, 1935; A.M., 1936. Development of capitalism and business cycles in Japan, 1868-1897. 1940. *Harvard.*

SIDNEY WEINTRAUB, B.C.S., New York, 1935; M.B.A., 1936. Monopoly and the economic system. 1940. *New York.*

RAMSAY WOOD, M.A., Columbia, 1936. Conditions of oligopoly and oligopsony. 1941. *Columbia.*

Labor and Labor Organizations

CHARLES PHILLIPS ANSON, Ph.D., North Carolina, 1940. A history of the labor movement in West Virginia. Accepted.

WARREN J. BAKER, B.S., Illinois, 1929; M.S., California, 1933. Labor relations legislation and trade unionism. 1940. *Wisconsin.*

HARRY PRICE BELL, A.B., North Carolina, 1928; A.M., Columbia, 1930. Theory of collective bargaining under Section 7a and the National Labor Relations act. 1940. *Brown.*

RUDOLF FRIEDRICH BERTRAM, A.B., Chicago, 1935; A.M., 1935. Labor relations in the Tennessee Valley Authority. 1940. *Chicago.*

EUNICE S. BISCHOF, A.B., Barnard, 1926; A.M., Columbia, 1927. Labor as a factor in industrial location. 1941. *Columbia.*

WALTER ELLIOTT BOLES, A.B., Southwestern, 1932; M.A., Vanderbilt, 1933. The Fair Labor Standards act, with emphasis on certain regional aspects. 1939. *Vanderbilt.* Accepted.

DEAN O. BOWMAN, B.S., Purdue, 1933; M.S., 1934. The National Labor Relations Board and collective bargaining. 1941. *Michigan.*

BRAILSFORD BRAZEAL, A.B., Morehouse, 1927; A.M., Columbia, 1928. Origin and development of the Brotherhood of Sleeping Car Porters. 1941. *Columbia.*

LEO C. BROWN, A.B., St. Louis, 1926; A.M., 1927. Collective bargaining in the leather industry, with special reference to Massachusetts. 1940. *Harvard.*

ROBERT KENNETH BURNS, A.B., Washington, 1933. Industrial relations under the international arbitration agreements in the American newspaper industry. 1940. *Chicago.*

EVERETT JOHNSON BURTT, JR., A.B., Berea, 1935; M.A., Duke, 1937. Collective bargaining in the pulp and paper industry of Maine. 1941. *Duke.*

JAMES EDWARD CHACE, JR., A.B., Amherst, 1923; M.B.A., Harvard, 1925. Industrial relations in Florida. 1940. *Chicago.*

EDGAR HARRISON CLARK, JR., Ph.D., Harvard, 1939. Swedish unemployment policy, 1914-1939. Accepted.

EDWARD FULTON DENISON, JR., A.B., Oberlin, 1936; A.M., Brown, 1938. Wage and hour regulation under the federal public contracts act. 1940. *Brown.*

MILTON DERBER, B.A., Clark, 1936; M.A., Wisconsin, 1937. The new unionism and collective bargaining. 1940. *Wisconsin.* Accepted.

JOHN T. DUNLOP, Ph.D., California, 1939. Movements of wage-rates in the business cycle.

JAMES WHITCOMB ERRANT, Ph.D., Chicago, 1939. Trade unionism in the civil service of Chicago, 1895-1930. Accepted.

JOHN DEAN GAFFEY, A.B., Ohio State, 1935; A.M., 1935. The productivity of labor in the rubber tire manufacturing industry. *Columbia.* Accepted. (Published as No. 472 in Columbia Studies in History, Economics, and Public Law.)

WALTER GALENSON, Ph.D., Columbia, 1940. Rival unionism in the United States. (Published by American Council on Public Affairs, New York, 1940.)

CARRIE GLASSER, A.B., Brooklyn, 1933; A.M., Columbia, 1934. Wage differentials: the case of the unskilled. *Columbia.* Accepted. (Published as No. 476 in Columbia Studies in History, Economics, and Public Law.)

JOHN MORRISON HANDSAKER, Ph.D., Chicago, 1939. The Chicago cleaning and dyeing industry, a case study in "controlled" competition. Accepted.

FREDERICK HARRIS HARBISON, Ph.D., Princeton, 1940. Collective bargaining in the steel industry—recent developments covering negotiations with the C.I.O., independent, and company unions. Accepted.

JAMES E. HARRIS, B.S., Columbia; M.A., Fordham. The labor encyclicals and industrial warfare. 1940. *Fordham.*

GEORGE HERBERT HILDEBRAND, JR., A.B., California, 1934. Development and present status of wage theory, with application to public policy. 1940. *Cornell.*

SAMUEL ERVIN HILL, B.A., Ohio Wesleyan, 1935; A.M., Harvard, 1938. The teamsters union: collective bargaining in the over-the-road trucking industry of New England. 1940. *Harvard.*

M. K. HORNE, JR., Ph.D., North Carolina, 1940. The treatment of seasonal workers under the Mississippi compensation law. Accepted.

PHILIP L. HOWELL, B.A., Pennsylvania, 1934. Economic consequences of the closed shop. 1941. *Pennsylvania.*

HOWARD L. HURWITZ, A.B., Brooklyn, 1936; A.M., Columbia, 1937. Theodore Roosevelt and labor. 1941. *Columbia.*

VERNON JENSEN, Ph.D., California, 1939. Labor relations in the northwest lumber industry.

KEITH WHITAKER JOHNSON, A.B., Kansas, 1934; M.A., Duke, 1937. Racial division of labor in the South. 1941. *Duke.*

HOWARD S. KALTENBORN, B.A., Nebraska, 1937; M.A., 1938. Mediation in labor disputes. 1941. *Wisconsin.*

CHARLES E. KILLEEN, B.A., St. Norbert; M.A., Wisconsin, 1933. The influence of the Roman Catholic Church on the labor movement. 1942. *Wisconsin.*

PHILIP TURNER KING, A.B., Richmond, 1938. The seniority principle and the railway brotherhoods. 1941. *Johns Hopkins.*

JOHN H. KLINGENFELD, B.A., Amherst, 1913. The Walsh-Healey act: a case in public administration. 1941. *American.*

THOMAS A. KNOWLTON, B.A., Maine, 1933; M.A., 1934. Railway labor unions and the contraction of job opportunity—a study in union behavior. 1940. *Wisconsin.*

ROBERT JOHN LANDRY, A.B., Amherst, 1935; A.M., Cornell, 1937. Employment opportunities as affected by cyclical and secular change in the automobile industry. 1940. *Cornell.*

MOSES LUKACZER, A.B., Columbia, 1932; A.M., 1935. The genesis and application of the doctrine of prevailing wages. 1941. *Columbia.*

SAMUEL J. LUKENS, Ph.D., Michigan, 1940. The selection and development of foremen.

WAYNE LESLIE MCNAUGHTON, Ph.D., Columbia, 1940. Development of labor relations law. (Published privately.)

PATRICK MURPHY MALIN, B.S., Pennsylvania, 1924. The contract system in women's coat and suit industry of New York City, 1935-1938. 1941. *Columbia.*

FRANK ANTHONY MANCINA, A.B., Chicago, 1936; M.B.A., 1938. The labor philosophy of the Catholic Church. 1940. *Chicago.*

FREDERICK MEYERS, A.B., North Carolina, 1938; A.M., 1939. The economic philosophy of organized labor. 1941. *North Carolina.*

MAURICE P. MOFFATT, B.S., Pennsylvania Teachers, 1934; A.M., Pennsylvania State, 1935. Collective bargaining in the northern anthracite field of Pennsylvania. 1941. *Columbia.*

OTIS EMERY MULLIKEN, A.B., Harvard, 1928; A.M., 1934. The Massachusetts Board of Conciliation and Arbitration. *Harvard.*

CHARLES A. MYERS, Ph.D., Chicago, 1939. Employment stabilization and the Wisconsin act. Accepted.

PHILIP CHARLES NEWMAN, A.B., Columbia, 1938. The labor movement in New Jersey, 1828-1940. 1941. *Columbia.*

RUSSELL ARTHUR NIXON, A.B., Southern California, 1934; A.M., Harvard, 1938. The problem of employability. A consideration of certain fundamental aspects of the labor market. 1940. *Harvard.*

PAUL HERBERT NORGREN, Ph.D., Harvard, 1940. The Swedish system of collective bargaining. Accepted.

FRANK C. PIERSON, A.B., Swarthmore, 1934. The problem of union responsibility: a study of the violations of union contracts. 1941. *Columbia.*

JUDD POLK, A.B., LL.B., Michigan, 1935. Public control of wages. 1941. *Michigan.*

SPENCER POLLARD, A.B., Harvard, 1932; B.Litt., Oxford, England, 1935. Some aspects of the problem of democracy in its application to the government of labor unions, with special reference to the United Mine Workers of America and the United Automobile Workers of America. 1940. *Harvard.*

ROY A. PREWITT, B.S., Missouri, 1934; M.A., 1936. An analysis of experience with certain phases of labor legislation in Missouri. 1941. *Cornell.*

CLIFFORD PRUEFER, B.B.A., Cincinnati, 1937; A.M., Minnesota, 1939. The effects of the Minnesota minimum wage on the power laundry industry in Minneapolis. 1941. *Minnesota.*

THOMAS WESLEY ROGERS, A.B., Birmingham-Southern, 1927; A.M., Chicago, 1928. Factors affecting the distribution of unemployment. 1940. *Chicago.*

MURRAY ROSS, B.S.S., College of the City of New York, 1935. Industrial relations in the motion picture industry. 1941. *Columbia.*

OSCAR W. ROSS, A.B., Pennsylvania State, 1930. Industrial homework in the United States. 1941. *Columbia.*

ERNEST RUBIN, B.S., College of the City of New York, 1937; A.M., Columbia, 1938. Labor legislation and the Supreme Court since 1900. 1941. *Columbia.*

John I. Saks, B.A., Cincinnati, 1933; M.A., 1934. The payment of non-regulated wages: legislative and administrative remedies. 1940. *Wisconsin.*

Mandal Robert Segal, A.B., Amherst, 1936. Company unionism and the labor boards. 1940. *Chicago.*

J. Whitney Shea, A.B., Houghton, 1932; M.A., Columbia, 1935. Development of labor organization in New York State, with special reference to the New York State Federation of Labor. 1942. *Cornell.*

Myrna Siegendorf, B.A., New Jersey College for Women, 1939; M.A., Wisconsin, 1940. Unionism in public employment. 1942. *Wisconsin.*

Robert Snider, A.B., Harvard, 1933; M.B.A., 1934. The management functions of labor unions—a case study in employee-employer coöperation. 1941. *Columbia.*

Earl D. Strong, Ph.B., Grinnell, 1909; A.M., Wisconsin, 1912. The Amalgamated Clothing Workers. *Columbia.* Accepted. (Published privately.)

Jerome Leo Toner, O.S.B., A.B., Washington, 1931; A.M., Catholic, 1935. The closed shop in American labor movement. *Catholic.*

Frances Margaret Whitehead, B.S., Illinois, 1928; M.S., 1931. Wages and hours of retail clerks in Illinois (outside Chicago). 1940. *Illinois.*

John A. Wolfard, B.A., Washington, 1926; M.A., 1937. Stabilization of earnings and employment. 1941. *Wisconsin.*

Money, Prices, Credit, and Banking

George P. Adams, Jr., A.B., Harvard, 1929. The scope and significance of governmental price control in wartime. 1940. *California.* Accepted.

W. Edward Alley. Recent trends toward nationalization in central banking: with particular reference to developments in the United States, Canada, France, and England. 1941. *Illinois.*

David Harry Angney, A.B., Idaho, 1932; A.M., Brown, 1934. The economics of unit commercial banking and bank unification in the United States—1928-1938. 1940. *Brown.*

George Leland Bach, A.B., Grinnell, 1936. Price level stabilization: some theoretical and practical considerations. 1940. *Chicago.*

Wesley Charles Ballaine, A.B., Washington, 1927; A.M., 1931. Legal regulation of the purchase of securities by mutual savings banks. 1940. *Chicago.*

Dorothy Beal, A.B., Chicago, 1937. Reserve lending agencies of the United States government. 1941. *Columbia.*

Marcus Bean, A.B., Brigham Young, 1925; M.S., Columbia, 1928. Government policy in banking and credit since 1929. 1939. *Columbia.*

Richard Carlton Bernhard, B.A., Reed, 1932; M.Sc., London School of Economics and Political Science, 1936. Capital theories and monetary policy. 1940. *Northwestern.*

Blanche Bernstein, A.B., Hunter, 1935; A.M., Columbia, 1936. The pattern of consumer debt, 1935-36: a statistical analysis. *Columbia.* Accepted. (Published as No. 6, studies in consumer instalment financing, by the National Bureau of Economic Research.)

Manoah Bialik, B.S., Columbia, 1933; M.S., 1934. Coöperative credit movement in Palestine. *Columbia.* Accepted.

Arthur Frederick Blaser, Ph.B., Yale, 1929; M.B.A., Harvard, 1932. The Federal Reserve Bank of Cleveland. *Columbia.* Accepted.

Arthur Irving Bloomfield, A.B., McGill, 1935; A.M., 1936. America's international financial position since 1929: an interpretative study. 1940. *Chicago.*

Brant Bonner, Ph.B., Chicago, 1931. State bank failures and liquidation in North Carolina. 1941. *North Carolina.*

Sam E. Braden, B.A., Oklahoma, 1932; M.A., Wisconsin, 1935. Difficulties of managed currencies in international economics. 1941. *Wisconsin.*

Roland Buford Brandis, Jr., A.B., Richmond, 1937; M.A., Duke, 1939. War and prices. 1942. *Duke.*

Benjamin Franklin Brooks, Ph.D., Chicago, 1939. Monetary theories in the United States before 1860. Accepted.

COURTNEY C. BROWN, B.S., Dartmouth, 1926. Notes on liquidity theory. *Columbia.* Accepted.

EDWARD C. BURRIS, B.S., Oklahoma Agricultural and Mechanical, 1924; M.S., 1927. A historical and statistical analysis of Oklahoma building and loan associations. 1941. *Wisconsin.*

D. R. CAWTHORNE, A.B., Georgetown, 1929; M.A., Ohio State, 1931. Bank credit and capital accumulation. 1940. *Ohio State.*

SHING LEUNG CHAU. A study of operating profits and of profits resulting from price changes. 1940. *Chicago.*

A. G. COSTANZO, B.A., Birmingham-Southern, 1937; M.A., Virginia, 1940. Recent developments in Italian monetary policy. 1941. *Virginia.*

EDISON H. CRAMER, Ph.D., Michigan, 1940. Denver as the financial center of the eastern Rocky Mountain region. Accepted.

ARTHUR W. CRAWFORD, A.B., Beloit, 1906; M.A., American, 1938. Monetary developments during the first and second terms of the Franklin D. Roosevelt administration. 1940. *American.* Accepted.

ELIZABETH WHITBECK DONOVAN, A.B., North Carolina, 1934; A.M., 1936. A history of banking in North Carolina since the Civil War. 1942. *North Carolina.*

JAMES S. EARLEY, Ph.D., Wisconsin, 1939. The British "cheap money" program, 1932-1937. Accepted.

JAMES L. FITZGERALD, B.A., Union; M.A., Fordham. Relation between commercial banking and small enterprise. *Fordham.*

RICHARD MURPHEY GOODWIN, A.B., Harvard, 1934; B.A., Oxford, 1936; B.Litt., 1937; A.M., Harvard, 1939. The statistics of money in England and Wales since 1925 and a comparison with the same in the United States. *Harvard.*

JOEL W. C. HARPER, B.S., Missouri, 1922; A.M., 1927. Scrip and other forms of local money. 1940. *Chicago.*

GABRIEL SYLFEST HAUGE, B.A., Concordia, 1935; A.M., Harvard, 1938. Deficit financing and the banking system. 1941. *Harvard.*

PALMER T. HOGENSON, B.A., St. Olaf, 1921; M.B.A., Harvard, 1924. Multiple unit banking. 1940. *American.* Accepted.

GRENVILLE ROSS HOLDEN, Ph.D., Harvard, 1939. Effects of fiscal policy on incomes and employment. Accepted.

ANNE ELIZABETH HULSE, B.S., New York, 1926; M.A., 1927. Bankers' balances: theory and practice of commercial bank reserves in the United States. 1941. *Columbia.*

ELGIN FRASER HUNT, A.B., Oberlin, 1917. American monetary theories, 1860-1913. 1940. *Chicago.*

T. W. JOHNSON, A.B., Dartmouth, 1937; A.M., Chicago, 1938. The influence of foreign investments in Peru. 1940. *Chicago.*

LOUIS FRANCIS KACMARYNSKI, A.B., Buena Vista, 1924; A.M., Iowa, 1925. Relationships between federal reserve banks of Chicago and other member banks in the district. 1940. *Chicago.*

ERWIN KEELER, A.B., DePauw, 1924. Structural changes in the Mexican banking system. 1941. *American.*

J. W. KEENER, B.A., Birmingham-Southern; M.A., Chicago. The cost price ratio and the supply of money. 1941. *Ohio State.*

JOHN KENNETH LANGUM, B.A., Colorado College, 1933; A.M., Minnesota, 1936. Treasury fiscal policy and member bank reserve balances, 1934-1940. 1940. *Minnesota.*

BAEN ELMER LEE, A.M., Chicago, 1921; M.B.A., New York, 1922. Modern banking reforms in China. 1941. *Columbia.*

JOSEPH E. LOFTUS, A.B., Notre Dame, 1937. The financial structure of commercial banks. 1941. *Johns Hopkins.*

EDEN CHRISTIAN LORENTZEN, B.S. in Com., Utah Agricultural, 1921; M.A., California, 1923. Minimum price legislation: its growth and methods of enforcement, with special emphasis on food distribution. 1941. *Northwestern.*

ROBERT MCCLURKIN. The Bank of North America. *Pennsylvania.*

BOOKER TANNER MCGRAW, Ph.D., Harvard, 1939. French monetary policy, 1927-1938. Accepted.

ROBERTA MCKAY, A.B., Colorado, 1935; A.M., Illinois, 1936. The coöperative movement in American banking. 1942. *Columbia.*

BERNARD ALOYSIUS MCLAUGHLIN, O.P., A.B., Holy Cross, 1916; A.M., Catholic, 1924. Composition of banking structure of the State of Rhode Island. *Catholic.*

SISTER M. GRACE MADELEINE, A.B., Immaculata, 1929; A.M., Pennsylvania, 1936. Monetary and banking theories of Jacksonian democracy. 1941. *Pennsylvania.*

GERALD JAMES MATCHETT, Ph.D., Clark, 1939. The double liability clause in American banking. Accepted.

HELEN J. MELLON, A.B., Brooklyn, 1935; M.A., Columbia, 1936. Development of qualitative credit theory. *Columbia.* Accepted.

ARTHUR J. MESSENGER, A.B., Ohio Wesleyan. Liquidity in the security markets. 1941. *Ohio State.*

LLOYD GARRISON MITTEN, B.S., Indiana, 1929; M.S., 1930. A statistical analysis of the financial structure of Iowa banks from 1917-1937. 1939. *Iowa.*

WALLACE PETER MORS, Ph.B., Chicago, 1932; A.M., 1935. Consumer loans by commercial banks. 1940. *Chicago.*

BERNARD NORTMAN, B.S.S., College of the City of New York, 1934; A.M., Columbia, 1935. Rates of interest and economic activity. 1941. *Columbia.*

GUY E. NOYES, B.A., Missouri, 1934. Mutual savings bank investments. 1941. *Yale.*

JAMES JOHN O'LEARY, A.B., Wesleyan, 1936; M.A., 1937. Study of the Federal Deposit Insurance Corporation. 1941. *Duke.*

W. NELSON PEACH, Ph.D., Johns Hopkins, 1939. The security affiliates of national banks. Accepted.

EDWARD JOSEPH PETERSON, B.B.A., Minnesota, 1938; A.M., 1940. A tabular adjustment plan for long-term corporate debt contracts. 1943. *Minnesota.*

G. LEROY PETERSON, B.S., Minnesota, 1933; M.S., 1935. Activities of commercial banks in agricultural credit. 1940. *Minnesota.*

WILLIAM TAYLOR PHILLIPS, A.B., Allegheny, 1931. History and application of the office of the Comptroller of the Currency. 1940. *Cornell.*

MARJORIE D. POSTON, B.Sc., M.B.A., Ohio State. Bank deposits and the supply of money. 1941. *Ohio State.*

LOWELL MASON PUMPHREY, A.B., Princeton, 1936; A.M., 1938. Stabilization funds and monetary management: a study of the exchange equalization account, 1932-1939. 1940. *Princeton.*

JOSEPH EDWIN REEVE, Ph.D., Chicago, 1939. Monetary proposals for curing the depression in the United States, 1929-35. Accepted.

WILLIAM W. REMINGTON, A.B., Dartmouth, 1939. The economic effects of deficit spending. 1941. *Columbia.*

ESTHER ROGOFF, A.B., Hunter, 1934. Central banking functions of the United States Treasury. 1941. *Columbia.*

IRVING G. RUDD, B.S., Harvard, 1929; A.M., Columbia, 1931. Investment operations of commercial banks in the United States, 1923-1936. 1941. *Columbia.*

JOSEPH CHARLES SEIBERT, B.S., in Business, Miami, 1932; M.B.A., Northwestern, 1933. Price behavior and industrial activity. 1941. *Northwestern.*

LOUISE SISSMAN, A.B., Cornell, 1928. Development of the postal savings system. 1941. *Columbia.*

RICHARD E. SLITOR, S.B., Harvard, 1932; A.M., Colgate, 1934. Some aspects of the problem of excess reserves, 1931-1939. 1940. *Harvard.*

JOHN HENRY SMITH, A.B., Iowa State Teachers, 1935; M.B.A., Chicago, 1939. The general problem of deflation in analyses of economic series. 1940. *Chicago.*

KENNETH M. SPANG, A.B., Dartmouth, 1933; A.M., Columbia, 1936. Relation of long-term rate of interest to the short-term rate structure. 1941. *Columbia.*

HAROLD STEIN, B.S., M.B.A., College of the City of New York, 1926. A comparative analysis of New York City savings banks. 1942. *Columbia.*

RICHARD TULLOSS STEVENS, A.B., Ohio State, 1926; M.A., 1931. Economic implications of the changing character of bank assets. 1941. *Ohio State.*

MILTON L. STOKES, Ph.D., Pennsylvania, 1938. The Bank of Canada. (Published by the Macmillan Company of Canada, 1939.)

ALBERT STETSON THOMAS, B.S., Massachusetts State, 1937; M.A., Wesleyan, 1938. Gold and the federal reserve system. 1941. *Columbia.*

GEORGE W. TOMLIN, JR., B.S., South Carolina, 1935. Prices in a socialist state. 1942. *Pennsylvania.*

HURSHEL UNDERHILL, B.S., Oklahoma, 1927; M.B.A., Kansas, 1930. The Federal Reserve Bank of Kansas City. 1941. *Columbia.*

JOHN JOSEPH WALSH, B.S., Columbia, 1912; A.M., 1914. Early banks in the District of Columbia. *Catholic.* Completed.

BRADFORD WARNER, A.B., Yale, 1932; M.S., Columbia, 1935. Term loans. 1941. *Columbia.*

GIN-PENG WAUNG, A.B., Shanghai Baptist, 1930; M.S., Columbia, 1933. Exchange depreciation and oriental trade. 1942. *Columbia.*

ROBERT C. WEEMS, JR., B.S., Mississippi State, 1931; M.B.A., Northwestern, 1934. The allocation of earning assets of small banks. 1941. *Columbia.*

JOHN BROOKE WILLIS, A.B., Dartmouth, 1930; B.S., Columbia, 1932. The use of commercial banks as a source of capital. 1941. *Columbia.*

C. ASHLEY WRIGHT, A.B., Princeton, 1928; A.M., 1929. Central bank policy and the business cycle. 1941. *Columbia.*

DAVID MCCORD WRIGHT, LL.B., Virginia, 1935; A.M., Harvard, 1939. The creation of purchasing power. 1940. *Harvard.*

PATON YODER, A.B., Goshen, 1935; A.M., Indiana, 1936. The paper money movement in Colonial Pennsylvania. 1941. *Indiana.*

Public Finance, Taxation, and Tariff

MARVIN A. BACON, A.B., Michigan, 1929; A.M., Ohio State, 1931. Shifting and incidence of the gasoline tax and its effect on motor fuel consumption: a statistical study. 1940. *Michigan.*

RUSSELL BOWERS, Ph.D., Michigan, 1940. The realization of income and federal income tax procedure. Accepted.

CECIL NATHANIEL BRENNAN, B.Com., British Columbia, 1933; M.S., Columbia, 1939. Taxation of corporate income in the British Empire. 1941. *Columbia.*

R. JEAN BROWNLEE, A.B., Pennsylvania, 1934; A.M., 1936. Income taxation in Delaware. 1941. *Pennsylvania.*

JESSE V. BURKHEAD, B.A., Carleton, 1938; M.A., Wisconsin, 1939. Public utility taxation in Wisconsin. 1941. *Wisconsin.*

JOHN KEITH BUTTERS, A.B., Chicago, 1937; A.M., Harvard, 1939. Discrimination in corporation income taxes. *Harvard.*

REYNOLD ERLAND CARLSON, B.S., Northwestern, 1936; A.M., 1937. Fiscal capacity of local government. 1941. *Harvard.*

JEROME B. COHEN, B.S.S., College of the City of New York, 1934; A.M., Columbia, 1935. The finances of the City of New York, 1929-1940. 1941. *Columbia.*

KENNETH J. CURRAN, B.S., Princeton, 1925; A.M., 1926. The taxation of excess profits in the United States. 1940. *Princeton.*

ALBERT CARL DAMBRUN, B.S., Duquesne, 1936; A.M., Princeton, 1939. A study of railway taxation in the United States. 1940. *Princeton.*

EDWARD GAIL DANIEL, A.B., Oregon, 1929; A.M., 1931. History of the United States postal policy, 1829-1862. *Harvard.*

C. H. DONOVAN, Ph.D., North Carolina, 1940. Fiscal readjustments in North Carolina, 1929-1937. Completed.

JOHN F. DUE, Ph.D., California, 1939. The theory of incidence of sales taxation.

PAUL WARREN ELLIS, A.B., Willamette, 1931; A.M., Oregon, 1933. Federal taxation of undistributed corporate profits. 1940. *Columbia.*

JOHN MITCHELL FIRESTONE, B.S., College of the City of New York, 1930; M.B.A., 1933. A statistical analysis of cyclical behavior of federal revenues. 1941. *Columbia.*

MARION HAMILTON GILLIM, A.B., Mount Holyoke, 1930; A.M., Columbia, 1938. Excess profits taxation in war and peace. 1941. *Columbia.*

A. BRISTOL GOODMAN, B.S., Oklahoma Agricultural and Mechanical, 1936; M.A., Wisconsin, 1939. Property tax administration in Wisconsin. 1941. *Wisconsin.*

RONALD E. GREGG, A.B., Allegheny, 1933; A.M., Pennsylvania State, 1935. Local government debts in Pennsylvania—major problems and solutions. 1940. *Pennsylvania.*

FRANKLIN P. HALL, B.A., Oregon, 1929. Tax burdens of Wisconsin manufacturing concerns. 1942. *Wisconsin.*

HERBERT WALTER HARGREAVES, A.B., Nevada, 1935; M.A., Clark, 1936. Obligations of federal incorporated agencies as contingent liabilities of the United States. 1941. *Duke.*

CLEMENT LOWELL HARRISS, B.S., Harvard, 1934. Gift taxation in the United States. *Columbia.* Accepted.

JOHN HART, B.S., Ohio State, 1931; M.A., 1932. Taxation of business corporations in Ohio. 1941. *Ohio State.*

WALTER W. HELLER, B.A., Oberlin, 1935; M.A., Wisconsin, 1938. State income and tax administration. 1940. *Wisconsin.*

VERNON L. ISRAELSON, B.S., Utah State Agricultural, 1929; M.A., Brigham Young, 1937. Over-all tax limitation and homestead tax exemption in theory and practice. 1941. *Wisconsin.*

LAWRENCE BENNETT JACK, B.A., British Columbia, 1932; M.A., California, 1935. Control of local government finance in Canada, the United States and Australia. 1941. *McGill.*

CHARLES NOBLE LANIER, JR., A.B., Davidson, 1929; M.A., Vanderbilt, 1938. Fiscal management in Tennessee state government. 1940. *Vanderbilt.*

MAURICE WENTWORTH LEE, Ph.D., Chicago, 1939. Anti-chain-store tax legislation. Accepted.

OSCAR F. LITTERER, B.A., Cornell College, 1929; M.A., Minnesota, 1932. The treatment of capital gains and losses in the income tax. 1941. *Wisconsin.*

WILLIAM FOSTER LOUGHEED, A.B., McMaster, 1936. The development and control of local financial statistics in selected states. 1940. *Chicago.*

JOSEPH G. MCCLINTIC, B.A., Central (Missouri), 1924; M.A., Missouri, 1937. Comparative income tax burdens in Wisconsin, California, and New York, with special reference to migration of taxpayers. 1941. *Wisconsin.*

CHARLES SIDNEY MILLER, B.C.S., Iowa State, 1931; M.A., 1933. The fiscal system of eight states with special reference to the Nebraska "white spot." 1939. *Iowa.*

FLOYD WAYNE MOORE, A.B., Albion, 1910; M.A., Michigan, 1922. Taxation of railroads in Michigan. 1941. *Northwestern.*

JULIAN DONALD MORGAN, A.B., Illinois, 1934; A.M., 1935. The use of the federal taxing power for non-revenue purposes. 1940. *Illinois.*

REX J. MORTHLAND, A.B., California at Los Angeles, 1933; A.M., California, 1934. State administrative supervision of local indebtedness in selected states. 1940. *Chicago.*

EUGENE ABRAHAM MYERS, B.A., Pittsburgh, 1934; M.A., 1936. History of taxation in Pennsylvania. 1941. *Pittsburgh.*

HERBERT E. NEWMAN, A.B., Birmingham-Southern, 1936; M.A., Virginia, 1938. An analysis of the federal debt, 1922-1937. 1940. *Virginia.* Accepted.

NORMAN NYBROTEN, B.S., Platteville State Teachers, 1935. Testing tax assessments for equalization. 1941. *Wisconsin.*

KENNETH H. PARSONS, Ph.D., Wisconsin, 1940. State aids, farm taxes and some related public policies in Wisconsin. Accepted.

J. RICHARDS PETRIE, B.A., New Brunswick, 1930; M.A., 1932. Tax systems in Canada. 1941. *McGill.*

ALONZO SMITH POND, A.B., Utah, 1926. Special assessments in downstate Illinois. 1941. *Northwestern.*

THOMAS JESSE REYNOLDS, A.B., Swarthmore, 1933; A.M., Columbia, 1935. Cyclical change in property taxation. 1941. *Columbia.*

SAMUEL ROSENBERG, B.S., Columbia, 1931; A.M., 1933. Tax exemptions on new housing. 1941. *Columbia.*

DANIEL SCHEINMAN, A.B., Wisconsin, 1933. The division of the costs of unemployment relief in Massachusetts, Illinois, and Pennsylvania. 1940. *Chicago.*

EDWARD B. SHILS, B.S. in Econ., Pennsylvania, 1936. Finances and financial administration of the school district of Philadelphia. 1940. *Pennsylvania.*

EDWARD B. SCHMIDT, A.B., Nebraska Wesleyan, 1922; A.M., Nebraska, 1932. An appraisal of the Nebraska tax system. 1940. *Nebraska.* Accepted.

HAROLD ROBERT SPIEGEL, A.B., Albion, 1932; A.M., Tufts, 1934. An analysis of the fiscal program of the federal government in recent years. 1940. *Chicago.*

ISRAEL STIEFEL, A.B., Pennsylvania, 1925; LL.B., 1928; A.M., 1932. Corporate taxation in Pennsylvania as a factor in industrial migratory trends. 1941. *Pennsylvania.*

PAUL JOHNSTONE STRAYER, A.B., Swarthmore, 1933; A.M., Columbia, 1935. The taxation of small incomes. *Columbia.* (Published by the Ronald Press.)

IRVING TENNER, B.S. in Comm., Northwestern, 1930; M.B.A., 1933. The theory of municipal financial reporting and its relationship to municipal funds. 1940. *Northwestern.* Accepted.

ORBA F. TRAYLOR, B.A., Western Kentucky State Teachers, 1930; M.A., Kentucky, 1932. J.D., Northwestern, 1936. Alcoholic beverage taxation in Kentucky. 1941. *Kentucky.*

HENRY HILGARD VILLARD, A.B., Yale, 1932; B.A., Cambridge, 1934. Public expenditure and the national income. *Columbia.* Accepted.

EDWARD C. WELSH, Ph.D., Ohio State, 1940. Administrative protection: an institutional study of the administrative features of the United States tariff. Accepted.

WALTER WILSON, Ph.D., Clark, 1939. A financial history of Worcester up to 1898. Accepted.

WILLIAM EDWARD ZIMMERMAN, A.B., Chicago, 1936. Short-term borrowings of state and local governments. 1940. *Chicago.*

Population and Migration

W. T. ALBRECHT, B.S., Carnegie Institute of Technology, 1929; A.M., Pittsburgh, 1934. The reaction to Malthus' essay on population. 1940. *Chicago.*

RAFAEL DE J. CORDERO, A.B., Puerto Rico, 1927; A.M., Columbia, 1928. The problem of our population in Puerto Rico. 1940. *Columbia.*

LEON GOLDENBERG, B.S.C., Liège, 1925; M.A., Chicago, 1927. Economics of a stationary population: a study of certain populations and economic tendencies in France from 1872-1911. 1940. *Northwestern.*

DAVIS MOODY HARRISON, B.S., Ursinus, 1929; M.A., Duke, 1933. History of English population doctrines, 1800-1860. 1941. *Duke.*

WALTER G. LEZIUS, B.S., M.A., Ohio State. A comparison of the geographic factors affecting the population growth of Columbus and Toledo. 1940. *Ohio State.*

HARLAN ELLIOT MCGREGOR, B.A., Iowa State, 1934; M.A., 1935. A declining population and economic stability. 1940. *Iowa.*

DON W. PADEN, B.A., M.A., Iowa State, 1935. The economic consequences of a declining rate of population growth. 1940. *Iowa.*

HAROLD WILLIAM SAUNDERS, B.A., Penn (Iowa), 1930; M.A., Iowa State, 1936. Population pressure: a study in social equilibrium. 1940. *Iowa.*

Social Problems and Reforms

KENNETH CHARLES BEEDE, B.A., George Washington, 1927; M.B.A., Harvard, 1929. Urban housing: quantitative and qualitative measures of demand and supply in local housing markets. 1941. *American.*

JOSEPH DAVID COPPOCK, A.B., Swarthmore, 1933; A.M., Columbia, 1934. Electric home and farm authority: government in the consumer financing business. *Columbia.* Accepted. (Published as No. 5, studies in consumer instalment financing, by the National Bureau of Economic Research.)

ELISABETH ARMOUR CURTISS, A.B., Wellesley, 1928; A.M., Columbia, 1930. Consumer protection as a basis for market-restricting legislation. 1941. *Chicago.*

Frank Greene Davis, B.A., Howard, 1933; M.A., Ohio State, 1935. The effects— Social Security act on the status of the negro. 1939. *Iowa.*

Fred Otto Erbe, B.A., Drake, 1933; M.A., Iowa, 1935. A study of the social backgrounds of the life inmates at Fort Madison Penitentiary. 1939. *Iowa.*

Millard Faught, A.B., Columbia, 1938; M.S., 1939. Economic aspects of the vacation industry in New England. 1941. *Columbia.*

Frank Ziegler Glick, Ph.D., Chicago, 1939. The Illinois Emergency Relief Commission. Accepted.

Herbert Goldhamer, A.B., Toronto, 1929; A.M., 1931. Non-profit voluntary organizations in Chicago. 1940. *Chicago.*

Albert Hoyt Hobbs, B.A., Pennsylvania State, 1933. Migration from a distressed area. 1941. *Pennsylvania.*

Robert H. Johnson, B.A., Maryville, 1936; M.A., Iowa, 1937. The national state and the economy. 1940. *Iowa.*

Scott Keyes, B.A., Pennsylvania State, 1932; M.A., 1933. Land use problems in the rural urban fringe. 1940. *Wisconsin.*

William H. Koenig, A.B., Cincinnati, 1918; LL.B., 1919; B.S., in Commerce, 1920. The economics of national self-sufficiency. 1942. *Columbia.*

Elizabeth P. Lam, A.B., William and Mary, 1928; A.M., Chicago, 1930. The place of Marxist ideology in Christian social philosophy. 1940. *Chicago.*

Horacio Clemente Lava, B.S., Philippines, 1926; A.M., California, 1928. Levels of living in the Ilocos Region, Philippines. 1939. *Stanford.* Accepted.

Forest La Violette, A.M., Chicago, 1934. Types of adjustment of the second generation Japanese on the Pacific Coast. 1940. *Chicago.*

Leonard Charles Marsh, B.Sc., London, 1928; M.A., McGill, 1933. Unemployment and economic status: a study of the incidence of unemployment and relief in Canada. 1940. *McGill.*

Jitsuichi Masuoka, B.A., Emporia, 1928; M.A., Hawaii, 1931. The westernization of the Japanese family in Hawaii. 1940. *Iowa.*

Henry Muller, A.B., Colgate, 1935; A.M., Pennsylvania, 1937. Home ownership: certain social phenomena and attitudes. 1941. *Pennsylvania.*

Donald J. O'Connor, A.B., Syracuse, 1935; A.M., 1937. Wartime controls of consumption. 1941. *Columbia.*

Helen Potter, A.B., Vassar, 1933. Federal protection of the consumer. 1940. *Johns Hopkins.*

Edwin C. Rozwenc, A.B., Amherst, 1937; A.M., Columbia, 1938. The protective union movement—a study in consumer's coöperation before the Civil War. 1941. *Columbia.*

Geddes William Rutherford, B.A., Missouri, 1913; M.A., Harvard, 1916. Metropolitan problems of the District of Columbia. 1941. *American.*

Martin Edward Schirber, A.B., St. John's, 1931; A.M., Catholic, 1936. The Antigonish movement: its method and meaning. 1940. *Harvard.*

Ernest E. Schwarztrauber, B.A., Miami, 1912; M.A., Columbia, 1913. State aid in workers' education—a Wisconsin experiment. 1940. *Wisconsin.*

John J. Shanley, A.B., Seton Hall, 1928; A.M., 1930; Diploma, Fordham School of Sociology and Social Service, 1934. Paterson, New Jersey: the changing welfare of its people and the predominant causal influences responsible for such change. 1940. *Fordham.* Accepted.

B. L. Smith, Ph.B., Chicago, 1933. A socio-political study of the American social scientists. 1940. *Chicago.*

Helen Sorenson, B.A., Alberta, 1930. An economic interpretation of the consumer movement. *Harvard.*

E. H. Spicer, A.B., Arizona, 1932; A.M., 1933. A study of the relationship between the economic life and the social organization of a group of Yaqui Indians near Pascua, Arizona, with the purpose of discerning the basis of their social integration. 1940. *Chicago.*

Johannes Stuart, Ph.D., California, 1939. Economic and social factors in neighborhood disorganization for Berkeley, California.

PHILIP THORSON, B.S., Minnesota, 1937; A.M., American, 1938. Financing of public housing with particular regard to governmental policy. 1940. *New York.*

HAROLD FRANCIS TREHEY, A.B., Holy Cross (Wellington, New Zealand), 1930; A.M., Catholic, 1936. Principles and constituent elements of a modern guild system. *Catholic.* Completed.

WILLIAM J. TRENT, A.B., Livingston, 1930. Occupational characteristics of white collar workers among negroes. 1941. *Pennsylvania.*

FRANCIS SIDNEY WILDER, Ph.D., North Carolina, 1939. The measurement of regional variations in American standards of living. Completed.

STEPHEN WILSON, B.S., Pittsburgh, 1930; M.A., 1932. Social and economic causes and consequences of pure food and drug legislation. 1940. *Pittsburgh.*

Insurance and Pensions

SAM ARNOLD, B.S., Ohio State, 1935; M.B.A., 1937. The applicability of experience rating in unemployment insurance to the objectives of employment stabilization. 1941. *Ohio State.*

DONALD CHESLEY BAILLIE, A.B., Toronto, 1935; A.M., 1936. Old age pensions in Ontario. 1942. *Columbia.*

CURTIS MILLER ELLIOTT, A.B., Illinois, 1934; A.M., 1935. Investment and other insurance problems arising from the increased sale of annuities. 1940. *Illinois.*

SARA GAMM, B.S., Northwestern, 1935. Administration of unemployment insurance—New York. 1940. *Chicago.*

ROGER STANTON HAMILTON, A.B., Pittsburgh, 1929; A.M., Tufts, 1931. Twenty-five years of workmen's compensation in Massachusetts. 1940. *Harvard.*

ACIS JENKINSON, 3RD, B.S., Pennsylvania, 1935; A.M., 1937. Factors involved in measuring the amount of life insurance to be carried on the life of an individual for business purposes. 1941. *Pennsylvania.*

RICHARD BUHMANN JOHNSON, B.A., Texas, 1934; M.A., 1936. The life insurance reserve and its effect upon the community. 1941. *Texas.*

CHARLES VINCENT KIDD, A.B., Princeton, 1935; A.M., 1937. Employer experience rating in unemployment insurance. 1941. *Princeton.*

FRANK J. LEWAND, A.B., Pennsylvania, 1928; A.M., 1933. Invalidity insurance as part of the federal social security program. 1940. *Pennsylvania.*

HARRY MALISOFF, B.S., New York, 1931; A.M., Columbia, 1934. The emergence of unemployment compensation. *Columbia.* Accepted. (Published in *Political Science Quarterly.*)

JAMES S. PARKER, B.A., Beloit, 1922; M.B.A., Northwestern, 1928. Economic principles and policies of social security reserves. 1940. *Wisconsin.*

JAMES M. SILBERMAN, B.A., Wisconsin, 1938. History of unemployment insurance in the United States. 1942. *Wisconsin.*

ELIOT J. SWAN, A.B., California, 1932. Fiscal aspects of government participation in unemployment insurance. 1940. *California.*

CHARLES MANN WINKLER, B.S., College of the City of New York, 1911; C. E., Brooklyn Polytechnical Institute, 1913. Replacement of life insurance policies. 1940. *Columbia.*

Pauperism, Charities, and Relief Measures

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Socialism and Coöperative Enterprises

J. A. Bekker, A.B., Bethel, 1934; A.M., Kansas, 1935. The soviet quest for security. 1940. *Chicago.*

Abram Bergson, A.B., Johns Hopkins, 1933; A.M., Harvard, 1935. Wage variations among industrial workers in the soviet union. A study in socialist economics. 1940. *Harvard.*

Joseph Carwell, A.B., New York, 1935; A.M., Columbia, 1939. History of post-Marxian socialism. 1941. *Columbia.*

Dudley Dillard, B.S., California, 1935. Proudhon Gesell and J. M. Keynes: an investigation of some "anti-Marxian socialist" antecedents of Keynes's *General Theory of Employment, Interest, and Money.* 1940. *California.*

James C. Drury, B.C.S., M.C.S., New York. The coöperative movement in a free competitive system. 1940. *Fordham.*

Clark Kerr, Ph.D., California, 1939. Self-help coöperatives in the United States.

H. Haines Turner, A.B., Swarthmore, 1930. Successful consumers' coöperatives in the United States. *Columbia.* Accepted.

Statistics and Its Methods

Wendell Mavity Adamson, A.B., Indiana, 1928; A.M., 1937. The measurement of income in small geographic areas. 1941. *Columbia.*

A. Joseph Creshkoff, B.A., Pennsylvania, 1937. Statistics of the national measurement of wealth and debt. 1940. *Pennsylvania.*

Samuel James Dennis, B.S., Dartmouth, 1928; A.M., Harvard, 1939. Measure of the volume of international trade. *Harvard.*

John Dana Durand, Ph.D., Princeton, 1940. Census measurement of unemployment in the United States. Accepted.

Joseph H. Finnegan, B.S., New York, 1934; M.A., 1936. Estimating population in intercensal years. 1940. *New York.*

Eugene Forsey, B.A., McGill, 1925; B.A., Oxford, England, 1928; M.A., 1932. The distribution of the national income in Canada, 1926-1936. 1940. *McGill.*

Joseph Albert Frank, A.B., Central, 1936; M.A., Vanderbilt, 1937. Methods of constructing indexes of employment and payrolls, derived from unemployment compensation data. 1939. *Vanderbilt.* Accepted.

John Wadsworth Gunter, B.S., North Carolina, 1933; A.M., 1939. Factor analysis of commodity price behavior. 1941. *North Carolina.*

William M. Hoad, A.B., Michigan, 1927; A.M., 1930. A real estate price study; with particular reference to Toledo, Ohio. 1940. *Michigan.*

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Alvin Mayne, A.B., Chicago, 1935; M.B.A., 1938. Application of multiple factor theory to business research. 1940. *Chicago.*

Nilan Norris, A.B., Stanford, 1930; M.A., 1932. Some contributions to the theory of statistical averages. 1940. *Stanford.* Accepted.

Charles Frederick Schwartz, Ph.D., Virginia, 1939. Income in the South. Accepted.

Victor Earle Smith, B.A., Michigan State, 1935; M.A., 1936. An application and critique of certain methods for the determination of a statistical production function for the Canadian automobile industry, 1917-1930. 1940. *Northwestern.*

Harold H. Wein, B.S.S., College of the City of New York, 1936; M.A., Columbia, 1939. Reliability of statistical economic formulae. 1941. *Columbia.*

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WEHRWIRTSCHAFT: ECONOMICS OF THE MILITARY STATE

War preparation and warfare are the simple and well defined objectives of economic planning in the military state. This type of economic organization has been called forth by the doctrine of total war. Besides the traditional use of the military proper, total war embraces two new weapons: psychological and economic warfare. In the economics of the military state there is no distinct line of demarcation which separates war from peace. War is no longer regarded as a passing stage of abnormality to be replaced in short by normal conditions of peace; and war economics is no longer a special branch of public finance but penetrates the whole of economic science.

In the economics of the military state, there is no unused capacity, industrial or otherwise, since all resources are placed in the service of war preparation and war. The profit motive is retained, but is subject to important modifications. Private initiative, inasmuch as it is recognized and allowed to emerge, is vested with the function of serving the economics of the military state. Depletion of the stock of accumulated wealth, as a source of current consumption, is coördinated with current production, the other source. The traditional concept of normalcy with its excess of national income produced over national income consumed is abandoned.

Evolution of War Economics in Recent German Literature

The intensive occupation with the economic aspects of war preparation and warfare which started in Germany with the advent of the Hitler regime has resulted in a stupendous volume of literary output in the course of the years. Research institutes and university chairs for the investigation and propagation of war economics were established by the authorities, who also assumed financial responsibility for the printing and publishing of numerous treatises and monographs on war economics. All this is remarkably different from the situation in 1914 when Werner Sombart spoke of the economists as follows: "We had nothing to give that could have been of direct service to the great cause. Nothing has become more clear in our minds than this: our coöperation was not needed in any respect."[1] Correspondingly it is said now that "economic science cannot be acquitted of the grave guilt of insufficient preparation for the [first] World War."[2]

Though attempts have been made to appraise nazi economic policies as the result and outcome of German economic development within the immediate and more remote past, it does not seem possible to regard

[1] W. Sombart, "Die Volkswirtschaftslehre und der Krieg," *Internationale Monatsschrift*, 9:243 (1914).

[2] Lt.-Col. K. Hesse, "Wehrwirtschaftswissenschaft und Kriegswirtschaftswissenschaft," *Der Deutsche Volkswirt*, Aug. 25, 1939, p. 2323.

them exclusively as the result of an evolutionary process denoted by the growth of "social policy" and interventionism. To be sure, interventionist tradition in Germany has facilitated the rise of a planned economy of the nazi type. But the crucial point is that war preparation and warfare has been the simple and well defined objective of this planned economy since it was started in 1933. The great depression was only an occasion for this policy of centralized planning which itself was motivated by the desire for war preparation. This point is missed by such writers who interpret the slump as the cause of nazi economic policy, and economic recovery as its goal.[3]

The Doctrine of Total War

The emphasis upon economic preparation for war must be viewed in the light of the fact that the doctrine of total war was accepted in Germany at a comparatively early time. There is much probability that the notion and concept of total warfare originated in the bellicose mind of General Ludendorff, an early protagonist of the nazi movement. He made use of this concept in his World War memoirs, and elaborated upon it in a later publication entitled *Total War.*[4] Total war "directly touches the life and soul of every single member of the belligerent nations."[5] The new type of war is the result of the introduction of universal service, of population growth and the use of new weapons whose complexity and destructiveness carry the war deep into the heart of the enemy country, and expose the civilian population to leaflet, radio, bomb, deprivation and starvation. Correspondingly, in the recent German literature on war the distinction is made between three forms and means of total warfare, "military, economic, and spiritual, including under the latter head all the varied devices of diplomacy and propoganda."[6]

Besides the traditional use of the military proper, total war, thus, embraces two new weapons: "spiritual," or psychological, and economic warfare. Psychological warfare is defined as "the planned preparation and execution of operations aiming at strengthening or destroying the spiritual resistance of the belligerents by means of moral powers," as the strengthening of moral powers at home, their destruction in the enemy country, and the exercise of influence upon public opinion in the world in favor of the

[3] For the most notable example see C. W. Guillebaud, *The Economic Recovery of Germany* (London, 1939). To him, Hitler is a Keynesianized promotor of recovery. War as goal of nazi economic policy is hardly mentioned in the lengthy monograph.

[4] An English translation of this book was published under the title *The Nation at War* (London, 1936). Another early exponent of total warfare was Professor Ewald Banse, a bellicose geographer, whose *Volk und Raum im Weltkriege* was published in English under the title *Germany Prepares for War* (New York, 1934).

[5] E. Ludendorff, *The Nation at War*, p. 15.

[6] Col. H. Foertsch, *The Art of Modern Warfare*, p. 9 (New York, 1940).

home country.[7] Like the economic weapon, the psychological one has developed a scientific discipline in its own right. In spite of the dramatic element which underlies psychological warfare, this aspect of total war has found even less attention in foreign countries than the economic aspect of total war.[8]

Total War and Economics

The relationships between war and economics can be reduced to three fundamental categories: (1) economic postulates may be the cause, motive, or goal of war; (2) war is an evil that does not terminate in itself but has far-reaching effects upon the economy and other phases of social life of belligerents and neutrals; (3) economics has become a powerful weapon of warfare. It is this relationship between war and economics which has come to the fore in nazi Germany. The discipline which deals with it is called *Wehrwirtschaftslehre*. It is its function "to equip the defense with all the supply which is necessary for war, and provide a sufficient stock of raw materials, foodstuffs, and means of payment. . . . It also has to make preparations securing the transfer of the peace economy into a war economy without difficulty and loss of time."[9] This description does not fully disclose the dissensions among the participants in the earlier discussion of war economics. Many of these controversies seem idle to the superficial observer since they center upon the proper definition of the discipline. However, the importance of this question is much greater than might be expected if one surveys the pedantic display of fanciful and perverted argumentation which has been applied to it.

There was nothing academic in this controversy, since it symbolized the struggle between various groups for mastery and control of the new discipline and its application in practice. Most of the participants in the discussion were army officers and economic writers of the more popular type, who were prominent in the Nazi party and eager to establish and expand a field of economics, theoretical and applied, which would offer a great variety of opportunities. The academicians, on the other hand, were much more reticent. There was no academic economist of repute among the godfathers of the new discipline. It was only when it was firmly established and had permeated the body of traditional economics and the teaching and research institutions that the soothsayers who had survived the

[7] Dr. Blau, "Die geistige Kriegführung in Rahmen der Gesamtkriegführung," *Jahrbuch für Wehrpolitik und Wehrwissenschaften*, 1939, pp. 94 *ff*. (Hamburg, 1939).

[8] For an illuminating discussion by a newspaperman see E. Taylor, *The Strategy of Terror* (Boston, 1940). Bibliographies have been published by F. Scherke and Gräfin Vitzthum, *Bibliographie der geistigen Kriegführung* (Berlin, 1938), and by the Polish General J. Gasiorowski, *Bibliographie de Psychologie Militaire* (Warsaw, 1938).

[9] H. Franke, ed., *Handbuch der neuzeitlichen Wehrwissenschaften*, vol. 1, p. 741 (Berlin and Leipzig, 1936).

academic cataclysms of 1933 and the following years abandoned their reserve. After this had taken place, the literature, which until 1938 had emphasized programs and postulates, became more technical and analytical.[10]

The Economics of the Military State

Historically, the new discipline had evolved as economics of war proper, to be distinguished from economics of peace. The abandonment of this disjunction is characteristic of the development in nazi Germany. The economics of war and peace have assumed uniform character in the *Wehrwirtschaft*, which covers both. *Wehrwirtschaft* can best be translated as "economics of the military state." It is "the dynamic principle which embraces peace and war economics, and stimulates their efficiency for the purpose of armed defense."[11] Thus total war erases the line of demarcation which separates war from peace, and calls forth the economy of the permanent military state. "A totalitarian policy must . . . elaborate in peace-time plans for the necessary preparations required for the vital struggle of the nation in war."[12] Incidentally, the same holds good for psychological warfare, the other weapon of total war: "On this front there is no truce; here war never ends. It was raging before the first gun spoke; it will still be raging when the diplomats of Europe gather together under the chandeliers or by some lakeside to dictate or negotiate a peace. Peace offensives are just offensives on the battlefront of the mind and war scares are just war."[13]

The economics of the military state is divided into four phases: (1) the economics of war preparation; (2) the economics of mobilization; (3) the economics of war; (4) the economics of demobilization. The erasure of the line of demarcation between peace and war economics marks a fundamental change in the economics of war. No longer is it regarded as a passing stage of abnormality to be replaced shortly by normal conditions of peace. In the military state the economics of war preparation and war is perpetuated and becomes a lasting component of the new structure. In this perverted order where the standards of normalcy change and values are transformed, evil becomes good and good evil. Not only has war economics become permanent and "normal"; it also has permeated all phases of economic science and economic life. In the past not amounting to more than a branch of public finance, it now penetrates the whole of economics.

[10] Examples of the earlier type are the various writings of army officers like Koeth, Hesse and Thomas. The second type is represented by such books as Professor A. Lampe's *Allgemeine Wehrwirtschaftslehre* (Jena, 1938), and the collection of articles by various economists in the *Weltwirtschaftliches Archiv*, 51:437 *ff*. (May, 1940).

[11] Lt.-Col. Warlimont, "Volk und Wehrwirtschaft," *Jahrbuch der Deutschen Gesellschaft für Wehrpolitik und Wehrwissenschaften*, 1936, p. 27 (Hamburg, 1936).

[12] E. Ludendorff, *The Nation at War*, p. 23.

[13] E. Taylor, *The Strategy of Terror*, p. 1 (Boston, Houghton Mifflin, 1940).

Bearing of Economics upon War

The utilization of economics for the purpose of total warfare has some bearing upon the execution and the aim of the new type of war. It is recognized that there has always been some degree of mutual interdependence of military operations and economics. Total war intensifies the interdependence to such a degree that it becomes necessary to destroy the military power of the enemy and his economy as well. In this connection the following postulates for successful total warfare are established: (1) military operations and economic warfare must be integrated; (2) war economics must serve military operations; (3) military operations must be adjusted to prevailing economic conditions.[14] The conquest or destruction of important centers of enemy industry or raw materials might be as decisive for the outcome of the war as the destruction of an enemy army. Thus military operations can become a decisive factor in economic warfare.

It is the function of the war economist to supply the strategist with the basis for planning operations.[15] Economists are asked to get used to "thinking soldier-like"; they are "soldiers of total war like the soldiers on the front."[16] It is also said that "the dependence of modern warfare on its economic basis—on the supply of raw materials, on the complete exploitation of the industrial plant, and the utilization of the last bit of ground for the production of food for the population—results in the conclusion that, for the cultivated countries of western Europe at least, the effort should always be to carry the war as soon as possible into the territory of the enemy, in order that his economic basis may be destroyed or at least disordered, while one's own is kept as undisturbed as possible. The anxiety to avoid a protracted war of position will lead to a similar conclusion."[17]

To turn to the distinctive characteristics of the economics of the military state as they appear in recent German literature: (1) This economy is definitely an economy of scarcity, not of abundance. This applies to raw materials, human resources, and financial means. There is no unused capacity, industrial or otherwise. The utilization of men and materials is pushed to its limits. No problem of idle money and idle men arises since both are placed in the service of war preparation and war. (2) There is centralized planning under maintenance of some elements of the price mechanism. (3) There are important modifications of the profit motive as the motor of economic activity.

[14] Major-General Thomas, "Operatives und wirtschaftliches Denken," *Kriegswirtschaftliche Jahresberichte*, 1937, p. 15.

[15] *Ibid.*, p. 16.

[16] *Ibid.*, p. 18.

[17] Col. H. Foertsch, *The Art of Modern Warfare*, pp. 240 *ff.* (New York, Veritas Press, 1940).

Economic Motivation in the Military State

The profit motive, while retained, is subject to important modifications. Economic realism has forced its recognition, although it is discredited in public opinion and official ideology. In those sectors where it has not been possible to replace it by other motivating forces, it has been rigidly limited in its operations. According to Werner Sombart, there is a "devilish idea" hidden in profit calculation. It exerts a "deadening influence," and is "one of the most vicious inventions with which mankind has been fooled by Satan. A large part of our misery is connected with its spread. It has destroyed a colorful world, lowering it to the grey boredom of monetary valuation."[18] However, in spite of all romantic lament of doctrinaires and politicians, private enterprise is regarded as irreplaceable, partly because of its efficiency, partly for political reasons. Thus the attempt is made to reconcile the apparently incompatible: planning for war, and fostering private initiative. It is said that the latter objective is especially emphasized by the military.[19] The position of the entrepreneur is characterized as follows:

> The responsibility of the entrepreneur in matters of war economics is extraordinary. He can only live up to it if he has been sufficiently disciplined, or, if he is expressly told what to do. . . . To a high degree, war economics is planning, and interference of the authorities with economic life is unavoidable. However, the economy can retain its character as free economy to a much higher degree than it seems possible on the outset, if there is a favorable disposition and attitude towards war economics in enterprises and among workers, *i.e.,* if economic conscription is not felt as compulsion but is accepted as a matter of course.[20]

Thus the profit motive is blended with a large number of other motivating forces which range from fear, obedience, willingness to imitate and excel others in the support of the regime and its aims, to what is believed to be patriotic enthusiasm and a misunderstood and perverted feeling for what is not the common wealth but rather the common "illth." Moreover, profits are subject to a number of direct and indirect limitations, such as price controls, compulsory investment of excess dividends, and restrictions upon the salary of corporation officials. It is only under especial circumstances that government enterprises in the strict meaning of the word are created. Some are created to serve as yardsticks to control prices, while others take care of new experiments and ventures which are too risky and unprofitable to be carried out by private industry.[21] In the general scheme, however, private enterprise is viewed as the most fitting executer of the orders of

[18] W. Sombart, *Deutscher Sozialismus,* pp. 313, 315 (Charlottenburg, 1934). An expurgated version of this book has been translated under the title *A New Social Philosophy* by K. F. Geiser (Princeton, N.J., 1937).

[19] K. Hesse, "Wehrwirtschaft als wissenschaftliche, militärische und wirtschaftliche Aufgabe," *Kriegswirtschaftliche Jahresberichte,* 1938, p. 14, (Hamburg, 1938).

[20] *Ibid.,* pp. 28 *ff.*

[21] O. Goebel, "Wege der Durchführung einer Wehrwirtschaft," *Jahrbuch für Wehrpolitik und Wehrwissenschaften,* 1937-38, p. 164 (Hamburg, 1938).

the government, which has assumed the double rôle of customer and regulator of economic life.

On a previous page we characterized war preparation and warfare as a simple and well defined objective of public policies in the military state. It is, however, recognized that

> the clear unambiguousness vanishes as soon as the general goal is separated into specific goals of a more concrete nature, an unavoidable procedure. There might be discord among the specific goals. Even if there is agreement on the whole, considerable diversity of opinion can arise in matters of jurisdiction, ways and means, and the prospective period of preparation before the attainment of the desired conditions of armament and supply. Indeed, there exist considerable controversies.[22]

The Market in the Military State

Thus private initiative, inasmuch as it is recognized and permitted to develop, is vested with the new function of serving the aims of the military state. The latter

> makes the attempt to create market conditions which induce private enterprise to pursue their interests in the direction desired by the authorities. In this manner a task which exceeds the powers of the most genial economic dictator of a centrally regulated economy, is distributed among millions of expert entrepreneurs, whose existence depends upon permanently solving the puzzles of the market. It is self-understood that even such a type of regulating the market cannot do without the most serious interferences with the course of economic development during wartime. It is not the degree but the kind of public policy which is defined and restricted by the recognition of economic policies which are based upon maintenance of the market. Instead of the direct command which works against the conditions of existence of the business unit and its own laws of motion, use is made of the principle of indirect steering. . . . However, the plea for this type of economic policy which is based upon maintenance of the market must not be mixed with individualistic approval of the interests of the individual enterprise. Economic freedom will only be recognized inasmuch as the initiative of the private entrepreneur is desirable because of the socially desirable service which it performs.[23]

Thus a professor of economics, who makes a plea for maintenance of the market, a "market economy of the military state" (*marktliche Wehrwirtschaftstheorie*). He strongly opposes price fixing. Otherwise one is forced to fix all prices. Private freedom of disposition and price regulations cannot exist together. If they do, automatic steering of the economy is wanting. To him, the competitive price remains the steering wheel of economics in the military state. These thoughts display a curious blending of political opportunism and subservience with strong leanings in favor of a type of traditional economics of ultra-conservative hue.[24] On the whole,

[22] *Ibid.*, p. 157.

[23] A. Lampe, *Allgemeine Wehrwirtschaftslehre*, pp. 12 *ff.* (Jena, 1938).

[24] See, for example, the chapter on price fixing in Professor L. v. Mises' *Kritik des Interventionismus* (Jena, 1929).

however, it is not often that the economics of the military state is based upon rigid principles. The general attitude is rather pragmatic: "War," it is said, "if correctly understood, does not permit the establishment of a scientific system [of economics]. It requires the complete adjustment of science to its changing phenomena."[25] However, within the limits indicated by this pragmatic attitude, it is possible to establish the following system of production, consumption, distribution and circulation in the military state.

Control over Production and Consumption

The flow of current consumption has two sources: current production and the stock of accumulated wealth.[26] The traditional concept of normalcy with its excess of national income produced over income consumed is abandoned. Depletion of the stock of accumulated wealth is coördinated with current production as a source of current consumption. It is said, however, that at the present time the latter source is of greater importance for Germany than the former. This applies also to current production as means of payment for import goods. This is said to be a more plentiful source of such payments than the stock of wealth, since gold reserves and foreign investments are scarce. Current production is subdivided into production for domestic use and production of export goods.

The stock of accumulated wealth can be depleted in four ways: (1) through depletion of inventories; (2) through destructive utilization of natural resources; (3) by making no allowances for replacement and maintenance of instruments of production;[27] (4) by draining foreign investments and gold reserves. "The gold reserve is without any significance for the purpose of domestic war finance."[28]

The national income is diverted to four uses: war, current requirements of the public authorities, investments, and civilian consumption. "The art of war finance consists of correctly proportioning these four uses."[29] Civilian consumption will stand the largest reduction. There might, however, occur an increase in the production of those consumption goods which still are produced without complete utilization of the existing productive capacity.[30] The reduction of civilian consumption is limited by the psychologi-

[25] Lt.-Col. K. Hesse, "Wehrwirtschaftswissenschaft und Kriegswirtschaftswissenschaft," *Der Deutsche Volkswirt*, Aug. 25, 1939, p. 2323.

[26] The exposition in the text is based upon K. C. Thalheim, "Die Grundlagen der deutschen Kriegsfinanzierung," *Weltwirtschaftliches Archiv*, 51:437 *ff.* (May, 1940).

[27] It is, however, expressly stated that the use of this method should be limited to a war of short duration. No such caution is expressed with reference to any other method of depleting the stock of national wealth. Other writers propose to limit the use of this method to the economy of war proper; during the stage of preparation the military state aims at strengthening and improving the whole mechanism of production. See J. Jessen, "Wehrwirtschaft und Finanzpolitik," *Finanzarchiv* (new ser.), 5:6 *f.* (1937).

[28] Thalheim, "Die Grundlagen der deutschen Kriegsfinanzierung," p. 439.

[29] *Ibid.*, p. 445.

[30] *Ibid.*, p. 455. Books and moving pictures are mentioned as examples.

cal effects to which the deprivations of the civilian population ultimately give rise. The expenditure for shelter is said to be "inelastic," that for food, "slightly elastic." It is believed that a reduction of civilian consumption to about 70 per cent of the pre-war standard of living is "the maximum psychologically tenable in the long run." This would reduce the consumption of goods which are not absolutely needed for the maintenance of life to about half of the pre-war level.[31] Requirements of the public authorities for purposes other than war can be reduced by curtailing their building activity. Private investments can likewise be decreased by slowing down public and private housing activity. However, there might be a net increase in this item on account of investments required by the armament industry.

If the national income remains constant, goods and services for war purposes are thus diverted from the following sources: (1) from public revenues inasmuch as they already were used for military purposes before outbreak of the war; (2) from public investments and current expenditures of the public authorities inasmuch as they can be reduced for the purpose of warfare; (3) from private investments inasmuch as they can be reduced for this purpose—the net reduction is believed to be small; (4) from civilian consumption to be reduced through taxation, loans, or forced saving through increased prices. If it is possible to increase the national income, it is expected that there will be an absolute increase in that part of the income which is not consumed by the civilian population.[32] However, since unused productive capacity has ceased to exist for all practical purposes, the discussion of the utilization of this capacity in conjunction with the concomitant increase in national income and its utilization for purposes of war and war preparation has stopped.[33] This, of course, is the central problem in countries where there is no full utilization of productive capacity.

Diversion from the production of consumers' goods to the production of producers' goods is regarded as the moot point of war economics. The transference is necessitated by the new technology of warfare. The structure of industrial production may, or may not, facilitate a swift diversion.[34] The diversion itself is carried out by the various tools of nazi economic policy which have developed since 1933. They have found adequate description elsewhere.[35] In the military state the economy is permanently geared to warfare, and the actual outbreak of military hostilities does not lead to the application of new devices of economic control and regulation. There is

[31] *Ibid.*, p. 447.

[32] *Ibid.*, pp. 446-448.

[33] For an example of the earlier literature see J. Jessen, "Wehrwirtschaft und Finanzpolitik," pp. 1 *ff*.

[34] Thalheim, "Die Grundlagen der deutschen Kriegsfinanzierung," p. 448.

[35] F. Wunderlich, "Germany's Defense Economy and the Decay of Capitalism," *Quart. Jour. of Econ.*, 52:401 *ff*. (1938); C. W. Guillebaud, *The Economic Recovery of Germany* (London, 1939); K. E. Poole, *German Financial Policies 1932-1939* (Cambridge, Mass., 1939); O. D. Tolischus, *They Wanted War* (New York, 1940).

no need for specific monetary policies in connection with the diversion. The latter is brought about by direct methods, which can be summarized as follows: (1) controlled allotment of raw materials and labor; (2) price control in accordance with the price-stop decree of October, 1936, and current adjustment of prices by a price commissar—one of the aims of this control is to prevent domestic goods from participating in the rise in prices occurring on the world market; (3) control of cost of material procured by the government; (4) public control over the central bank. According to the amendment of 1939 to the central bank law, only the chancellor is entitled to limit the credits to be advanced to the Reich by the bank. "One should, however, not forget that the economic conditions of money creation have changed since the first years of the new regime in as much as unused productive capacity in essential volume only exists in the new territories at the present time."[36] (5) Control of investments and preëmption of the capital market for government loans.

Agricultural versus Industrial Production

In the discussion of the productive organization an interesting shift in emphasis can be noted. While it has been customary among German writers in recent years to stress the significance of agricultural production, industry has come to the fore at the present time. It is said now that countries with highly developed industries can better manage to procure war resources, domestic as well as foreign, than agricultural countries. In this connection reference is made to the lower productivity of labor in agricultural countries.[37] The shift in emphasis can possibly be explained by a feeling of disappointment about the outcome of the agricultural "battle of production" which has been waged in Germany since 1933.[38] It is now admitted that "the total result of these efforts will not go beyond the maintenance of that level of production which was attained during the last few years."[39] There are no indications, however, that the superior position which agriculture holds in the social structure of nazi Germany has weakened. Productivity was not the only motive for its elevation.

War Finance

The outbreak of military hostilities does not necessitate substantial changes in the revenue system of the military state. Revenues are said to be high enough to secure a considerable part of war expenditures. This should not be surprising since there has been a gradual increase during the past

[36] Thalheim, "Die Grundlagen der deutschen Kriegsfinanzierung," pp. 450 *ff.*

[37] *Ibid.*, p. 442. This observation usually is based upon the authority of M. Manoilesco, the well known exponent of protectionism. He has again defended his thesis in a recent article, "Die theoretische Problematik des Aussenhandels," *Weltwirtschaftliches Archiv*, 51:1 *ff.* (January, 1940).

[38] For an analysis of certain aspects of this "battle" see H. W. Spiegel, *Land Tenure Policies at Home and Abroad*, ch. 6 (Chapel Hill, 1940).

[39] Thalheim, "Die Grundlagen der deutschen Kriegsfinanzierung," p. 454.

seven years in the part of the national income contributed to the government in the form of taxes and loans. Approximately half of the national income is appropriated through taxation. Thereby the government recovers a considerable part of armament expenditure, and prevents price inflation from assuming dangerous proportions. This is said to have been the secret of the success of the preceding public works program.

It is interesting to note the change in emphasis upon various aspects of war finance. The financial problem proper with its traditional alternative of loans and taxes has ceased to be in the fore. It is said to be "unthinkable that, at the present time, war should be prevented or stopped by the impossibility of securing neccessary means of payment. They are guaranteed by the printing press and by the creation of book money." It is, however, admitted that "a practical financial policy can aid in mobilizing and maintaining productive power during the war, while a wrong method of financing, as application of inflation without limits, would most severely endanger the maintenance of the productive effort."[40] The traditional financial devices are supplemented by the system of direct regulations of production and consumption. The latter are credited with working more swiftly and effectively. "For example, the combination of the procurement business with the allocation of raw materials and their preëmption for war industries secures a faster and more efficient adjustment than the exclusive use of the financial method of spending public money for procurement. In a similar manner, civilian consumption is much more efficiently adjusted to scarce supplies by means of a system of rationing and allotments than by limiting demand by means of curtailing income through taxation."

With reference to "the highly controversial problem of war profits," it is stated that "their prevention or limitation through an efficient system of price and profit control is superior in many respects to subsequently draining profits, which have already accrued, by means of taxation. The application of these direct methods of regulation can be regarded as the most important characteristic of war finance in the totalitarian state."[41] However, certain important functions are still assigned to financial policies. There still exists the old alternative of taxation, loans and inflation in order to drain the purchasing power of the civilian population in a manner which does not jeopardize production and productive power. Financial policy has also to secure an equitable distribution of the war burden, for psychological reasons and because "the manner in which the burden of war is distributed is of the greatest influence upon the future social structure of the nation."[42]

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[40] H. Jecht, "Stand und Probleme der deutschen Kriegsfinanzierung," *Weltwirtschaftliches Archiv*, 51:465 (May, 1940).
[41] *Ibid.*, p. 466.
[42] *Ibid.*, p. 467.

THE TWO FEDERAL REVENUE ACTS OF 1940[1]

Two revenue acts have been passed by Congress this year. The first, approved June 25, was a series of amendments hastily thrown together in what was then thought to be the closing days of the congressional session. This Act (1) reduced the amounts of personal exemptions, (2) increased by about 10 per cent individual and corporation income taxes, (3) increased surtax rates in the middle brackets and (4) increased most excises.

The Second Revenue act of 1940, applicable to corporations only, has three important features: (1) it levies a special tax on the excess profits of corporations; (2) it suspends during the life of the excess profits tax the Vinson-Trammell act designed to limit profits from naval, airplane and other defense contracts; and (3) it permits accelerated (five-year) amortization of the cost of certain facilities necessary for national defense. The Act also provides for those in military and naval services a new system of life insurance and credit on annuities under the Railroad Retirement acts. An amendment is made to the Social Security act for employers who had not received credit for contributions to state funds because they were late.

The first Act is expected to augment revenues by \$729,000,000 for the fiscal year 1941, and by about \$1,000,000,000 in a full year of operation. The second is expected to increase revenues still further by about \$500,000,000 in the calendar year 1941, and by \$900,000,000 to \$1,000,000,000 when the defense program becomes fully operative.

The Fiscal Situation

No year since the World War has seen such changes in the federal fiscal picture as 1940. In January the President estimated that the deficit for the fiscal year ending June 30, 1941, would be \$2,876,000,000. His estimate for national defense expenditure for 1941 was about \$1,940,000,000. This sum was only a fraction of the amount soon deemed necessary as he saw the German army overrun country after country in Western Europe. A revised estimate in June was for \$3,250,000,000 defense expenditures; in August for \$5,000,000,000. Total expenditures for 1941 were estimated in August at \$12,000,000,000 in contrast to \$8,000,000,000 in January. These amounts do not tell the full story. Congress was asked to appropriate increasingly huge sums for defense, not all of which could be expended in the current fiscal year. Exclusive of the cost of enforcing the acts for compulsory military training and putting the National Guard into active military service, Congress had appropriated over \$14,000,000,000 for defense purposes by August 5, 1940.

Even in May before the situation in Europe became so bad, and while defense appropriations were comparatively small, Secretary Morgenthau became concerned over the \$45 billion debt limit. At that time the working balance was \$1,300,000,000, a sum the Secretary thought unwise to reduce. Although the President had suggested additional tax revenues of \$460,000,000 in his January message, Congress ignored the request, and

[1] Preceding federal revenue acts passed since the adoption of the Sixteenth (Income Tax) amendment to the Constitution have been discussed in earlier volumes of the *American Economic Review*. Volume and page references are given in the *Review* of September, 1938 (vol. 28, p. 447). For the 1939 Act see the *Review* of December, 1939 (vol. 29, p. 695). Further analyses may be found in the authors' *Federal Income Tax* (1940).

in fact appeared to be in a mood to curtail the President's power rather than to follow his suggestions in full.

Late in May, however, the Administration apparently persuaded congressional leaders to draft a bill to raise $500 million new revenue and to raise the debt limit by $3 billion. It was generally thought that Congress would adjourn before the national party conventions were held in June and July and that a more comprehensive measure could wait until the new Congress met in January, 1941. Hearings on this bill had scarcely been completed before the President made a request for an additional billion dollars for defense purposes; so the tax measure, now obviously very inadequate, was withdrawn.

The second bill, revised to yield more than a billion dollars in a full year of operation, was quickly put in shape. Like the previous bill, it provided for increased income, estate, and gift taxes and for continuation of the excises soon to expire. In addition, it reduced the personal exemptions, increased corporation normal taxes and tobacco taxes and authorized an extension of the debt limit by $4 billion. This measure was rushed through the House with only six dissenting votes.

The Senate revisions made slight changes in the excises and added two somewhat extraneous amendments. At the insistence of Senator Byrd (Dem., Va.) the President was directed to reduce non-defense appropriations for the executive branch of the government for 1941 by a total of not less than 10 per cent. Much of the Senate debate related to this proposal and to the proposal sponsored by Townsend (Rep., Del.) to terminate at once the foreign silver purchasing provisions of the Silver Purchase act of 1934. Neither of these amendments was retained by the conferees. Important amendments introduced on the floor of the Senate and accepted there but thrown out by the Conference Committee were (1) Senator Connally's (Dem., Texas) measure for a special tax with very high rates to go into effect if and when war should be declared, and (2) the La Follette (Prog., Wis.) proposal for a tax on corporate excess profits to prevent the making of war millionaires. The Connally measure was the result of several years' work on the part of a special sub-committee appointed after the Nye munitions investigation of 1936.

Brief Summary of the First Law

The first Revenue act of 1940 is made up of four titles: Title I, the "permanent" income tax changes; Title II, the "temporary" (five-year) defense taxes; Title III, authorization of defense obligations amounting to $4 billion; and Title IV, amendments to the Public Salary act of 1939.

Title I. Four important changes were made in the income tax sections of the Internal Revenue code: (1) reduction of personal exemptions; (2) reduction of gross and net income requirements for filing returns; (3) in-

crease of the individual surtax and (4) increase of corporation rates. The personal exemptions of the 1939 law were reduced by one-fifth, except for dependents, and are now almost as low as recommended by the special subcommittee on war profits taxes for a war-time income tax. For a single individual the exemption is $800 instead of $1,000; for a married person or a head of a family, $2,000 instead of $2,500. Exemption for each dependent remains at $400. It is estimated that these changes will add 2,190,000 new taxpayers to the internal revenue rolls and will account for about $75,000,000 of new revenue. Of this amount it is estimated that $14,000,000 will come from new taxpayers, the remaining $61,000,000 from those already paying taxes under the previous Act.

Treasury experts estimated that the number of income tax filings would be more than doubled[2] by the new requirements for a return from every unmarried individual with a gross income of $800 or over and from every married person with a gross income of $2,000 or over. The previous law required a return from everyone with gross income of $5,000, or a net income of $1,000 if single, or $2,500 if married. The Treasury estimates that it will cost $8,000,000 to audit the additional 8,000,000 returns, but hopes to secure something between $25,000,000 and $45,000,000 from people who should have filed in the past but who have not done so.

Increases in the surtax are applicable to taxpayers having surtax net income[3] in excess of $6,000 and not in excess of $100,000, as shown in the accompanying table. Although the rates on incomes above $100,000 were not raised, those with incomes of such amounts will pay taxes of larger totals because of changes in rates on the lower brackets. It was estimated that the increases in these rates will yield an additional $177,000,000 annually.

Corporation rates began at 13.5 per cent on the first $5,000 of net income and increased to 15, 17 and 19 per cent. The top rate applied to corporations with net income in excess of $25,000. The additional revenue expected from these changes was estimated at $70,000,000 a year. (See Table II.)

Title II contains the so-called "temporary" defense taxes, with increases to be effective for five years. In general these increases were 10 per cent and were applicable to income, gift, estate, personal holding company, excess profits and capital stock taxes. Rates of admission taxes remain at one cent for each ten cents or fraction thereof, but the tax is henceforth applicable to tickets costing 21 cents and over instead of 41 cents and over. Taxes on cigarettes were increased slightly, but no changes were

[2] About 7,500,000 returns were filed in 1940. The Treasury estimates 8,000,000 more will be filed under the new law. 76th Congress, 3rd Session, *Hearings before the Senate Finance Committee on H.R. 10039,* p. 36.

[3] The amount of net income in excess of interest from U. S. bonds and from bonds of certain government corporations.

made in other tobacco excises. Slight changes are made in other sections of the Internal Revenue code applicable to alcoholic liquors, stock transfers, dues, passage tickets, automobiles and parts, radios, gasoline and oil. The excises continued at unchanged rates are those imposed for protection and for regulatory purposes.

TABLE I.—COMPARISON OF INDIVIDUAL INCOME TAXES ON NET INCOMES OF SELECTED SIZES ACT OF 1938 AND ACT OF 1940[1]

Net income before personal exemption[2]	Single person, no dependents		Married person, two dependents	
	Act of 1938	Act of 1940	Act of 1938	Act of 1940
$ 1,000	$ —	$ 4	$ —	$ —
1,500	14	24	—	—
2,000	32	44	—	—
2,500	50	64	—	—
3,000	68	84	—	—
4,000	104	123	12	35
5,000	140	172	48	75
6,000	216	255	84	114
7,000	292	343	120	163
8,000	378	449	184	246
9,000	464	559	260	334
10,000	560	686	343	440
12,500	815	1,043	570	741
15,000	1,104	1,476	831	1,118
17,500	1,439	2,022	1,130	1,581
20,000	1,834	2,666	1,469	2,143
22,500	2,289	3,410	1,868	2,804
25,000	2,804	4,253	2,327	3,571
30,000	3,914	6,063	3,385	5,315
40,000	6,384	10,080	5,779	9,227
50,000	9,334	14,709	8,621	13,741
75,000	19,484	28,481	18,403	27,293
100,000	33,354	44,268	31,997	42,948
250,000	129,284	147,576	127,766	146,388
500,000	305,224	330,933	303,568	329,637
1,000,000	680,184	718,404	678,436	717,036
5,000,000	3,790,164	3,917,390	3,788,370	3,915,986

[1] United States Treasury Division of Research.
[2] Maximum earned income assumed.

Increases in the rates provided by Title II are expected to yield in a full fiscal year $679,000,000 additional revenue of which $135,000,000 would come from the normal tax on corporations; $123,000,000 from income tax on individuals; $12 million from corporation capital stock and old excess profits taxes; $29 million from estate taxes; $3 million from gift taxes; and $376,200,000 from excises. The changes made by the Second Revenue act of 1940 modified these estimates. Corporation taxes are now expected to yield more, and, consequently, individual income tax yields are expected to be reduced by about $100,000,000.

Title III provides that the Secretary of the Treasury shall set aside the additional taxes collected for defense in a special fund to retire the $4 billion of obligations authorized in the second part of the title.

Title IV amends the Public Salary act so as to prevent the application of the penalty sections in case of tax deficiency due from an officer of a state or political subdivision for any tax year beginning before January 1, 1939, provided the deficiency is attributable to compensation paid indirectly by the United States.

The bill was approved by the President June 25. Changes in the income tax are applicable to taxable years beginning after December 31, 1939. Most of the other provisions went into effect when the bill was signed or July 1, 1940.

The Second Revenue Act of 1940

Senator La Follette's proposal for an excess profits tax and Senator Connally's war tax amendment were not merely individual expressions of a desire to prevent profiteering but were representative of a widespread determination that the misfortunes of war should not be taken advantage of to create a lot of millionaires. On July 1, the day many sections of the first Revenue act went into effect, the President sent a special message to Congress requesting a steeply graduated excess profits tax applicable to corporations, individuals and partnerships. The conferees on the first Revenue act had previously passed a resolution that such a measure be enacted as soon as possible and should be applicable to the calendar year 1940.

In compliance with this resolution and the President's request, the Treasury and the Joint Committee on Internal Revenue Taxation drafted proposals but along somewhat divergent lines. The Joint Committee advocated using average income received during the four-year period 1936-1939 as a basis for computing excess profits. The Treasury, however, advocated defining excess profits as those in excess of a normal percentage of invested capital.

The bill presented at the joint hearings of the House Committee on Ways and Means and the Senate Committee on Finance permitted the taxpayer the option of using either of these methods. When the bill was introduced into the House it retained this option, although it differed in some other respects from the first draft. It was an extremely complicated measure, chiefly because of the provisions for computing earnings and invested capital in the base years.

The rates for the excess profits tax computed on the average income basis were graduated in six brackets from 25 per cent on the first $20,000 above the credit and exemption to 50 per cent of excess profits over

$500,000. An additional income tax of 4.1 per cent was also imposed, thus making the normal tax 25 per cent.

If the invested capital method was used, the 4.1 per cent additional normal tax was not imposed and the rates were somewhat lower—20 per cent to 45 per cent. In either case a flat exemption of $5,000 of net income was allowed. Because of this specific exemption it was estimated that the new tax would apply to only 70,000 of the 500,000 corporations on the tax rolls.

There were pressing reasons for a new tax measure other than the desire to prevent profiteering. Representatives of the army and navy made clear to those formulating the bill that manufacturers were extremely reluctant to make contracts until they knew what their tax obligations would be. Furthermore, army, navy and air equipment contracts were difficult to secure because of the restrictions of the Vinson-Trammell act. This measure, first passed in 1934, amended in 1936 and 1939, required contractors to return to the Treasury all profits in excess of 10 per cent and 12 per cent of the price of naval vessels or any army or navy aircraft where the award exceeded $25,000. While negotiations for building war equipment were going on in June, 1940, Congress again amended the law to restrict such profits to 8 per cent.

As a result, little progress was made in the defense program. For example, Secretary Stimson stated that although Congress had made available in June $400 million for 4,000 airplanes and engines, the government had been able to complete contracts for only 33 planes in the seven weeks following.

A third cause of uncertainty, and in some ways the most important, was that connected with amortization. Manufacturers hesitated to invest large sums for plants and equipment that would probably be useless after the war emergency unless they would be allowed more generous depreciation deductions than those permitted by the existing laws and regulations.

The House bill provided for the suspension of the Vinson-Trammell act while the excess profits tax was in effect and for five-year amortization of the cost of plant equipment certified as necessary for national defense by certain officials.

A very controversial section provided that no emergency facility could be "destroyed, demolished, impaired or substantially altered without the written consent of the Secretary of War or the Secretary of the Navy," and that the special amortization plan would not be allowed unless this condition was accepted.

As in the case of the first Revenue act of 1940, the measure was pushed through the House under a stringent gag rule. After a three-hour debate

it was passed August 29, without a roll call and with no dissenting votes. The measure is estimated to yield $500,000,000 new revenue for the calendar year 1940, and over $900,000,000 for a calendar year in which the defense program becomes fully operative.

The Senate Bill

Almost three weeks elapsed before the measure was considered on the floor of the Senate. Such important revisions were contemplated that the Senate Finance Committee thought public hearings were advisable. The new bill kept the alternative methods of computing the excess profits tax credit but eliminated the double rate schedule, retaining the higher one running from 25 per cent to 50 per cent. Instead of the provision for an additional 4.1 per cent normal tax applicable in case the average income method was adopted, the Senate imposed on all corporations an increase of 3.1 per cent in the normal tax. This made the normal tax 24 per cent for corporations with incomes of $25,000 and over, in contrast to 18 per cent in 1939.

To alleviate the hardship that corporations would suffer from the House bill if their earnings were subnormal in the base period, the Senate substituted for the credit of 7 per cent of the first $500,000 of invested capital and 5 per cent on the remainder a flat 8 per cent of the entire amount of invested capital. Definition of invested capital was simplified and the specific exemption of $5,000 was increased to $10,000. Affiliated corporations were permitted to file consolidated returns for the excess profits tax.

Despite Treasury objections, the Senate Committee eliminated the provision granting to the government control of final disposition of amortized facilities acquired for national defense.

To overcome the inequity of taxing in one year income accrued over a period of years, the Senate bill permitted corporations to spread over several years income received from awards, judgments, contracts requiring more than one year to perform, income from discovery, exploration, and developments including patents and income in the form of a building erected by the lessee and acquired by the lessor.

The Senate rejected two somewhat extraneous amendments. One, proposed by Brown (Dem. Mich.), would have prevented future issuance of tax-exempt bonds by federal, state or local governments. Lee (Dem., Okla.) proposed that forced loans could be required by the government in case of emergency.

Several amendments offered just before the vote[4] was taken were accepted by Chairman Harrison in order to push the measure through. Thus Connally again won approval for his war tax amendment which had

[4] The Senate vote on the bill was 46 yeas, 22 nays.

been rejected by the conferees on the first Revenue act of 1940. It was again rejected by the Conference Committee appointed to consider the Second Revenue act.

Brief Summary of the Act

The Second Revenue act of 1940 consists of seven titles.

Title I—Corporation Income Tax. For taxable years beginning after December 31, 1939, the normal tax of every corporation with net income of more than $25,000 is the lesser of the following: (1) 22.1 per cent of normal tax net income or (2) $3,775, plus 35 per cent of the amount of normal tax net income in excess of $25,000. This, with the defense tax of the First Revenue act, makes the total normal tax 24 per cent for corporations with income in excess of $25,000.

Title II—Excess profits tax. All corporations except those specifically exempt are subject to a tax on "adjusted excess profits net income" for taxable years beginning after December 31, 1939, in graduated brackets, at the following rates:

Bracket	*Rate (per cent)*
Up to $20,000	25
Next 30,000	30
Next 50,000	35
Next 150,000	40
Next 250,000	45
Over 500,000	50

"Adjusted excess profits net income" means the excess profits net income minus a specific exemption of $5,000 and credit computed by either of two methods, net income or invested capital. If the net income basis is used, the credit is 95 per cent of the average base period (1936-1939) net income, plus 8 per cent of the net capital addition, or minus 6 per cent of the net capital reduction for the taxable year. Long-term capital gains and losses shall be excluded in computing income; and credit for dividends received shall apply, without limitation, to dividends on stock of domestic corporations. If the invested capital basis is chosen, the

TABLE II—COMPARATIVE CORPORATION NORMAL TAX RATES, ACT OF 1939 AND ACTS OF 1940
(per cent)

Taxable net income	1939 Revenue act	1940 First Revenue act		1940 Second Revenue act	Total normal tax
		Normal tax	Defense surtax		
Not over $ 5,000	12.5	13.5	1.35	—	14.85
$ 5,000–$20,000	13.5	15	1.5	—	16.5
$20,000–$25,000	14.5	17	1.7	—	18.7
$25,000 and over	18	19	1.9	3.1	24

credit is 8 per cent of the taxpayer's invested capital for the taxable year. Half of the amount of borrowed capital shall be included in computing invested capital. Long-term capital gains and losses shall be excluded under this option also. The Commissioner is given authority to make such adjustments as are necessary in cases of abnormal income or capital, but his decisions are subject to review by the United States Board of Tax Appeals.

If abnormally large income is received from a claim or contract for work extending over more than 12 months or from exploration, development or research of tangible property, the income may be spread over the years to which it is attributable.

Affiliated corporations have the privilege of making a consolidated return for the taxable year. Only one specific exemption of $5,000 is allowed for the entire affiliated group.

Title III—Amortization Deduction. A taxpayer may be allowed to amortize in 60 months the cost of an "emergency facility" which was completed after June 10, 1940. This privilege is granted for an emergency period, a period beginning June 10, 1940, and ending on the date when the President proclaims the facility is no longer required in the interest of national defense. To secure this privilege the facility must be certified as necessary for national defense by the Advisory Commission to the Council of National Defense and either the Secretary of War or the Secretary of the Navy. Contracts are required to protect the United States with reference to the future use and disposition of such emergency facilities.

Title IV—Suspension of the Profit-Limiting Provisions of the Vinson Act and Certain Provisions of the Merchant Marine Act, 1936. For the period that the excess profits tax is in operation the 8, 10 and 12 per cent profit limitations imposed by the Vinson-Trammell act and the Merchant Marine act on contractors for naval vessels, airplanes and certain other equipment are suspended.

Title V—Amendments to Internal Revenue Code. Several technical amendments are made to the income tax law. The excess profits tax used to complement the capital stock tax since 1933 is now called the "declared value excess profits tax." It remains in force. Personal service corporations are subject to the same income tax as other corporations but are exempt from the new excess profits tax if they so desire. In the latter case the shareholders are taxed much as are the members of a partnership.

Title VI—National Service Life Insurance and Provisions Affecting the Railroad Retirement Board. Every person enrolled in active service shall be granted life insurance on the five-year level premium term plan. The policies may not be less than $1,000 or more than $10,000. Military service may be credited toward the annuity requirements of the Railroad Retirement acts.

Title VII—Credit against Federal Unemployment Taxes. This title grants relief to those employers who failed to receive credit for unemployment taxes due under the Social Security act because their contributions to the state funds were not made in time.

The Act was signed by the President October 8, 1940.

Comments

The names of the two Revenue acts of 1940 are partly misleading. The chief purpose of the first Act apparently was to authorize additional borrowing of $4,000,000,000 and increases in taxes to pay off this amount in five years. The main purposes of the Second Act appear somewhat inconsistent; one main provision was to speed up the defense program by reducing taxes and by removing uncertainty about taxes to be levied on those providing the government with defense supplies, and the other main provision was to increase taxes on corporations, particularly on those making "excess profits" on defense contracts. The Second Act, by increasing corporation taxes and reducing dividends going to individuals, will reduce somewhat yields of individual income taxes authorized by other Acts.

Except for the fact that the law may be changed at any time and the belief that it probably will be changed soon, it might be expected to give a big impetus to the carrying out of the defense preparations. It may anyway because the accelerated amortization provisions and the excess profits credits and special relief provisions appear rather generous. By exercising the option of choosing the average of 1936-39 profits as the basis for determining taxable excess profits, the corporations making large profits in those years may continue to make large profits and, on the other hand, by choosing the invested capital basis the corporations making small profits or even losses in recent years will have the opportunity to increase their earnings greatly before becoming subject to the excess profits tax.

Practically all corporations earning over $5,000 net, however, will be subject to higher taxes than heretofore, much higher if their net profits exceed $25,000, and very much higher if earnings run to large amounts. Most of them can still console themselves, however, that normal corporation taxes in the United States are still much lower than in Great Britain, though they are not exactly comparable.

Besides the optional alternative credits and the $5,000 flat exemption, which make the excess profits tax inapplicable to most corporations, there are numerous other "easing" provisions. In computing the average base year credit, a deficit in one year may be disregarded. Half of borrowed capital is included in the invested capital base credit. This should encourage the use of venture capital and thus increase employment and pro-

duction. Corporations with annual income of less than $25,000 are permitted to carry forward unused income credits for one year. Specified classes of profits earned over a period of years but "realized" in one year may be spread over these years. Long-term capital gains and losses are disregarded. Affiliated corporations may file consolidated returns. The excess profits tax applies to corporations only. It does not, as recommended by the President, apply to individuals and members of partnerships; unlike corporations, they are subject to high surtaxes and may not accumulate tax-free surpluses. Personal service corporations may elect to be exempted from the excess profits tax, and be treated practically as partnerships.

The excess profits taxes of the last war period caused enormous administrative difficulties. The problems of determining promptly the invested capital of practically all of the industries of the country were insurmountable. The difficulties in connection with intangibles, "earned surplus," reorganizations, and "special assessments" in "hard" cases were likewise insuperable in any reasonable time and came near breaking down the Treasury's administrative machinery.[5] The drafters of the Second Revenue act of 1940 attempted to meet these difficulties by methods which would take too long to discuss here but largely by the use of definitions already established by practice and ruling, the use of basic data already of record, the treatment of intangible property like tangible property, the inclusion of half of borrowed capital in "invested capital," etc.[6]

In spite of all efforts, the law is very complicated and difficult to understand, though it is much less so than before the Senate amended it. Its administration will raise many difficult and complex problems, some of them unanticipated and provocative of prolonged litigation. The fact is that this kind of tax cannot be both fair and simple; doubtless this one will work hardships in some special cases but, in general, it appears equitable if not generous, especially so to small corporations.

It is true that we are still at peace, that business profits generally have been subnormal for a large part of the past decade and that taxes are already high—quite a different situation from that of 1917 and 1918 when our earlier excess profits taxes were enacted; but it is also true that we need to expedite our vast preparedness program in fact as well as on paper and that this will cost a great deal more in real sacrifice than most people yet realize.

The great present danger appears to be that nearly everybody thinks that billions for preparedness can be provided without costing him much

[5] See Blakey, *The Federal Income Tax,* chaps. 6, 7 and 23.

[6] See *Treasury Memorandum, Joint Hearings before the Committee on Ways and Means, House of Representatives, and the Committee on Finance,* U. S. Senate, 76th Congress, 3rd Session, on Excess Profits Taxation, etc., pp. 94, 95 (Aug. 9-14, 1940.)

real sacrifice. The capitalist wants normal or higher profits; the laborer, normal or higher wages and shorter hours. On the other hand, the government is pressed to see that no capitalist retains excess profits even at the risk of checking production of defense supplies necessary to avoid war, or at the risk of losing the war if it cannot be avoided. It is urged that taxes must be kept down even if we add billions to already unprecedented debt. The idea seems to be either that the unemployed—who have not demonstrated their extraordinary capacity—shall carry the cost of preparedness or that we shall finance nearly everything by borrowing. The latter is the seemingly easy way but involves the most hazards, those of inflation, repudiation, and economic chaos. Too few of us have learned that we cannot borrow preparedness and that the attempt to do so through financial and economic legerdemain is practically certain to be disastrous.

The new tax laws provide for only a small part of the additional funds already appropriated for defense, and they are only a fraction of what has already been appropriated for this purpose, to say nothing of more to come. It is unfortunate that our national finances and our entire national economy had not been put in order before we had to face another emergency of major proportions. On the other hand, we are fortunate that we have more time and resources to meet this emergency than Western European nations have had. How promptly and effectively we pull ourselves together and meet the challenge of the many tremendous new problems that confront us will be the supreme test of our economic and political system and of the competence of our citizens and statesmen.

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CUTTHROAT COMPETITION

Competition is cutthroat when an industry experiences subnormal earnings over a considerable period. This situation arises where excess capacity coincides with inability of producers to control production and prices. The experience of the cotton textile industry supports the view that cutthroat competition tends in time to correct itself. The excess capacity which developed in this industry around 1923 was substantially eliminated by 1937. Under certain conditions, however, it is quite possible for cutthroat competition to continue indefinitely. This possibility arises chiefly from the imperfection of the labor market.

I

Economists have long maintained that free competition tends to promote economic efficiency. Business-men, however, have remained singularly unconvinced. In trade journals and at manufacturers' conventions competition is termed "ruinous," "unethical," "cutthroat," "destructive." The control of competition through patents, tariffs, mergers, trade associations and informal agreements has been a major objective of business policy.

The competitive practices condemned by business-men are of two quite separate types, which should be clearly distinguished. Cutthroat competition sometimes refers to false advertising, adulteration of goods, commercial bribery, defamation of competitors, and similar fraudulent practices.[1] It would be generally agreed that such practices are undesirable, and they therefore raise no major question of public policy.

Second, and perhaps more commonly, cutthroat competition refers to acts which tend directly or indirectly to lower the existing price structure.[2] It can scarcely be argued, however, that price reductions are always unjustified. A price cut which reflects a reduction in raw material costs or an improvement in manufacturing technique is clearly reasonable. Under what conditions, then, does price cutting become cutthroat?

Most of those who denounce price cutting are rather vague on this point. Emphasis on the *motivation* of producers is reflected in such terms as "chiseler," "unfair," "unethical." In other cases certain *techniques* of price reduction, such as secret rebates or fictitious advertising allowances, are condemned. Neither of these criteria, however, provides a satisfactory basis for distinguishing cutthroat competition from competition in general. It does not matter very much what a price concession is called—"rebate," "allowance," "discount," or plain "cut." The important thing is that prices have been reduced. And they are probably reduced in most cases because some producers hope thereby to increase their short-run profits or bolster

[1] For a more complete list of such practices, see Leverett S. Lyon and others, *The National Recovery Administration*, Brookings Institution, Washington, 1935, especially chapters 22, 26, and 27.

[2] Most goods are sold at a wide variety of prices, which are not necessarily changed simultaneously or proportionately. It is therefore more correct to speak of the price structure being undermined than of the price being cut. The conventional term "price cutting" is used below, however, for reasons of convenience.

their cash reserves. There is no reason to assume that producers who reduce prices are more malicious or more greedy than their rivals.

It seems more useful to say that competition becomes cutthroat when prices and profits fall below a specified level. Cutthroat competition may be said to exist in an industry when the average rate of return on stockholders' investment remains for some time below the rate which would equalize the attractiveness of this industry and other industries to investors.[3] The period considered must be long enough to include years of prosperity as well as years of depression. The discussion which follows is concerned only with industries which experience subnormal earnings over at least one complete business cycle, and which therefore have some claim to the status of chronic problems.

Cutthroat competition, thus defined, can arise only where there is excess capacity of the fixed factors engaged in the industry. Excess capacity may be said to exist when, if all plants in the industry were to be used to capacity,[4] the profit ratio of the industry would be below normal. Under pure competition, subnormal profits indicate the presence of excess capacity, while profits above normal indicate a shortage of capacity. Under monopolistic competition, too, subnormal profits are reliable evidence of excess capacity, but the reverse is not necessarily true, since it is possible for profits to be normal or above normal even though excess capacity exists.

The definition of excess capacity may be further clarified by contrasting it with unused capacity. While *excess* capacity can refer only to an industry, unused capacity may refer either to an industry or to an individual plant. The unused capacity of a plant or an industry is measured by the difference between actual output and capacity output over a given period. But the presence of unused capacity does not prove the existence of excess capacity, nor can a measurement of the former provide any indication of the extent of the latter. The excess capacity of an industry is the amount which, if withdrawn from production, would bring a rise in prices sufficient to restore normal profits. This cannot be ascertained without an analysis of all demand curves in the industry.

[3] After allowance has been made for the relative riskiness of the industry under consideration, its earnings should correspond to the average earnings of all industries which are open to new producers. This definition is somewhat more general than the usual definition of "normal profits." It does not assume that total investment in all industries is constant, nor does it assume that pure competition prevails. It is quite legitimate to average the earnings of industries marked by differing degrees of monopoly, provided only that "closed" industries are not included.

The weakness of existing profits data, of course, limits the practical usefulness of this definition. Only in the most obvious cases can we be certain that cutthroat competition exists.

[4] By the capacity of a plant is meant that rate of operation which would give the minimum average total cost. Capacity in this sense is not fixed, but will vary with changes in the costs of the factors of production. For a good discussion of the possible meanings of capacity and excess capacity, see J. M. Cassels, "Excess Capacity and Monopolistic Competition," *Quart. Jour. of Econ.,* May, 1937.

The relation between excess capacity, unused capacity, and cutthroat competition may be restated as follows. Under pure competition all three will come into existence together and disappear together. Under pure competition indeed, the definition of excess capacity becomes synonymous with that of cutthroat competition, and to say that the former is the "cause of" the latter is mere tautology. Under monopolistic competition these simple relations no longer hold. If cutthroat competition exists, the other two conditions must also exist. Excess capacity and unused capacity may exist, however, without cutthroat competition making an appearance. This will be the normal situation of industries which produce a differentiated product and which can be entered with relative ease.[5] Again, unused capacity may exist though both excess capacity and cutthroat competition are absent. This will occur, for example, where the demand curves of individual producers intersect their short-run average cost curves to the right of the minimum point, but output is held below this point through price agreement, while at the same time new producers are barred from the industry.

The existence of excess capacity does not lead necessarily to subnormal earnings, provided that producers can prevent the excess capacity from being used. Cutthroat competition arises only when excess capacity is accompanied by inability of producers to control production and prices.[6] Control may be said to exist when there is in the industry some authority which consciously determines the direction and magnitude of price changes. The *technique* of control—trade association machinery, price leadership, informal consultation, or what not—is of secondary importance. The significant requirement is that there be some recognized means of reaching a consensus of opinion among the leading producers, and that all producers feel bound to abide by this opinion.

Inability of producers to control prices in the face of excess capacity has several characteristic results: a shrinking processors' margin, low and irregular earnings, failure and reorganization of some firms, and in time a probable shrinkage of capacity. The sequence of events, moreover, is much the same whether producers are few or many. Where producers are few the process of readjustment is more spectacular, the movement of prices

[5] See E. H. Chamberlin, *Theory of Monopolistic Competition,* Harvard Univ. Press, Cambridge, 1936, pp. 81-94. The presence of excess and unused capacity does not imply an adverse judgment on the performance of the industry. Provided consumers' preferences are assumed to be rational, it may be argued that the equilibrium adjustment under monopolistic competition constitutes what Chamberlin calls "a sort of ideal."

[6] The forces making for cutthroat competition may therefore be described most conveniently under two heads: conditions which give rise to excess capacity, and conditions which prevent sellers from controlling prices and production. No such description is attempted here. The ways in which excess capacity may develop have been frequently discussed. See, for example, D. H. Wallace, *Market Control in the Aluminum Industry,* Harvard Univ. Press, Cambridge, 1937, pp. 333-42. A discussion of the conditions which may make price control impossible will be found in L. G. Reynolds, *The Control of Competition in Canada,* Harvard Univ. Press, Cambridge, 1940, pp. 21-8.

is more violent and unpredictable, and personal animosities are more bitter. Beneath these surface differences, however, the results of competition are essentially the same. As marginal producers are eliminated, the downward pressure on prices is relieved, and profits tend to rise once more toward the normal level.

It is sometimes asserted that these adjustments occur only in the minds of economic theorists. In particular, the fact that bankrupt companies can be reorganized and resume production with lower fixed charges is often said to make the period of adjustment longer than classical writers supposed. This argument seems to rest on a misunderstanding. Marshall stated clearly that a plant will continue to be operated so long as its output returns any surplus above prime costs, *i.e.*, so long as the fixed assets have any value whatever.[7] If the business is an individual proprietorship, as most classical writers tacitly assumed, earnings can fall and the value of assets shrink without legal proceedings. If, however, the entrepreneur is a corporation which has issued securities bearing fixed rates of interest, legal recognition of a reduced rate of earnings on these securities requires reorganization of the company. Successive reorganizations enable the company to continue in production until its net earnings fall to zero, when there is no possibility of rehabilitating it through further reorganizations. All this is quite in accord with Marshallian theory. Reorganization is simply a means of restoring to the corporation something of the flexibility of the proprietorship, and thus assuring it approximately the same chance of survival.[8]

II

The view that cutthroat competition tends in time to correct itself is supported by the experience of the cotton textile industry.[9] The consequences of competition in this industry have been frequently lamented in trade journals and elsewhere. Excess capacity, as indicated by profit ratios, seems

[7] See, for example, *Principles of Economics*, v, ix, 3.

[8] It may be argued that the scaling down of capital values through reorganization, by allowing "normal" profits to be earned on a reduced investment, conceals the unprofitableness of the industry and encourages new producers to enter the field. This will be true, however, only if the prospective entrants direct their attention solely to the profit ratios of existing firms. If they are sufficiently prudent to calculate the margin between average unit cost (based on the price of *new* equipment) and the price of the product, they will be disillusioned concerning the profitableness of the venture.

[9] It is impossible to consider the cotton textile industry as a unit because of the great variety of its products. The discussion which follows relates only to producers of the principal product—grey cotton print cloth. Most print cloth is sold in the grey, through New York selling agents, to "convertors" who have the cloth printed and resell it to garment manufacturers, wholesalers or retailers. Cloth is sold in a few standard grades, based on weight and closeness of weave, and trademarking and advertising are unknown. The convertor is necessarily an expert judge of cloth, and advertising appeals would have little effect on him. The number of print cloth producers is relatively large; and no firm produces more than a few per cent of the total output. This branch of the industry thus approximates the conditions of pure competition.

to have appeared about 1923, and has persisted almost to the present day. The consumption of cotton goods has increased very little over this period,[10] due in part to the development and cheapening of rayon fabrics. At the same time the productive capacity of the industry has been increased by longer hours of plant operation and by the building of new plants in the southern states.

The possibility of spreading overhead affords a powerful incentive to longer hours of operation.[11] New England mills have traditionally operated a single 8-hour shift. In the South, however, a large reservoir of labor and the absence of laws regulating night work led to a steady growth of two- and even three-shift operation during the twenties. The NRA code for the industry limited each mill to 80 hours per week, but this had the effect of increasing rather than reducing the hours operated, since all producers then tended to operate the full 80 hours. The surviving New England producers were able to adopt this practice because of the widespread unemployment among New England textile workers. In 1936 each active spindle operated on the average 3,926 hours or 75 hours per week, compared with 2,869 hours or 55 hours per week in 1923.[12] This evidently amounts to an increase of almost one-third in the capacity of the industry during this period.

In addition to increased capacity from this source there has been extensive building of new plants in the southern states. The southern producer has a slight advantage in the cost of raw cotton, the cost of mill construction, and local tax rates, and a marked advantage in wage rates. During the twenties hourly wage rates of textile operatives were about 50 per cent higher in New England than in the South.[13] The differential in unit labor costs was undoubtedly less than this,[14] but it must still have

[10] The cotton consumption of domestic mills, which may be taken as a rough indication of the output of finished goods, was 3,120 million pounds in 1923, 3,423 million pounds in 1929, and 3,463 million pounds in 1936.

[11] Night operation, while it increases unit labor costs, cuts unit overhead cost almost in half. R. E. Loper, a textile engineer, has estimated that double-shift operation reduces the cost of manufacturing print cloth by about 5 per cent (*Textile World*, Feb. 4, 1928, p. 119). This estimate assumes that night wages are 10 per cent higher than day wages and that efficiency is from 5 to 8 per cent lower at night. In an industry which operates on so small a profit margin as textiles, a saving of 5 per cent may make the difference between failure and good profits.

[12] C. T. Main, Inc., *Growth and Decline of Cotton Spindles in the United States*, Boston, 1938, pp. 7-8.

[13] The following hourly wage-rates were reported by the Bureau of Labor Statistics:

	Men		*Women*	
Year	*North*	*South*	*North*	*South*
1920	.557	.437	.475	.358
1922	.422	.272	.371	.224
1924	.497	.306	.420	.247
1926	.448	.287	.371	.231
1928	.427	.286	.353	.234
1930	.431	.298	.353	.238

[14] Two things must be borne in mind here: (i) the efficiency of southern operatives may be lower than that of New England workers because of lack of training, climatic differences,

been considerable. No data are available concerning total unit costs in the two areas, but profits figures may serve as indirect evidence. From 1925-29 a selected group of southern companies earned 5.8 per cent on stockholders'

TABLE I—PROFITS IN COTTON TEXTILES AND IN ALL MANUFACTURING
PERCENTAGE TO CAPITALIZATION

Year	All manufacturing[1]	Cotton textiles		
		All[2]	Northern[3]	Southern[3]
1919	18.3	32.5		
20	12.3	12.1		
1	2.9	9.4		
2	10.2	11.4		
3	11.2	11.0		
4	10.0	1.3		
5	12.1	4.3	−1.6	5.2
6	12.4	3.2	−0.4	3.7
7	9.5	10.2	3.2	10.4
8	11.0	4.7	2.9	5.7
9			2.4	4.1
30				
1				
2				
3	0.7	6.6	3.8	10.2
4	3.0	1.3	−3.1	4.0
5	5.7	−1.0		
6	7.9	2.6		

[1] 1919–28: R. C. Epstein, *Industrial Profits in the United States*, National Bureau of Economic Research, New York, 1934, p. 242.

1933–36: W. L. Crum, "Cyclical Changes in Corporate Profits," *Rev. of Econ. Stat.*, May, 1939, pp. 49–61.

[2] 1919–28: R. C. Epstein, *op. cit.*, p. 254 ("cotton weaving").

1933–36: Federal Trade Commission, *Reports on the Textile Industries*, 1933–36.

[3] 1925–29: C. E. Fraser and G. F. Doriot, *Analyzing Our Industries*, McGraw-Hill, New York, 1932, p. 120.

1933–34: Cabinet Committee *Report on the Textile Industry*, 1934, p. 61. Federal Trade Commission, *op. cit.*, 1933–36.

All figures represent net income after charges as a percentage of stockholders' investment.

investment, while selected New England companies earned 1.5 per cent. A more complete survey for the years 1933 and 1934 showed earnings of 7.1 per cent in the South, 0.33 per cent in New England (Table 1). The relative profitableness of cotton textiles in the South caused plant capacity to

and the like. Union officials contend, on the other hand, that the efficiency of southern workers is sometimes higher because they have no preconceived ideas as to how many machines they should tend. (ii) Many southern workers live in company towns, rent their houses from the company, buy at company stores and from company-owned utilities. In this case wages may be either higher or lower than they appear to be, depending on whether the prices charged by the company are below or above the cost of providing the services. It is generally believed that these services are provided below cost and thus constitute an addition to nominal wages, though this too is denied by the union.

increase from 16 million spindles in 1923 to 18.5 million spindles in 1937.[15] These additional plants intensified the problem of excess capacity in the industry as a whole.

Frequent efforts have been made to bring excess capacity under control. Leaders of the industry have advised restriction of output; and the Cotton Textile Institute has tried to secure agreement among producers to this end. These efforts have been uniformly unsuccessful. An agreement among the sixty producers of print cloth would not only be difficult to secure and enforce, but it would necessarily receive considerable publicity and would be suspect under the Sherman act. Entrance to the industry, too, is relatively easy. Not only is the necessary investment small,[16] but support for new ventures has in the past been readily forthcoming from textile machinery manufacturers and local chambers of commerce. A restriction plan which increased textile profits materially would lead at once to fresh investment, and this would either break the plan or reduce its profitability. The most serious obstacle to agreement, however, has been the difference of viewpoint between southern and northern producers. New England producers have been inclined to welcome control, though even here the strong individualistic tradition of the industry has prevented complete agreement. Many southern producers, on the other hand, have failed to see why they should restrict their profitable operations in order to hold an umbrella over marginal New England mills.[17] On this rock of southern opposition all proposals for control have been broken.

Individual producers, of course, have frequently chosen to operate below capacity.[18] This voluntary restriction of output, however, has been in-

[15] C. T. Main, *op. cit.* The number of spindles in Virginia and North Carolina reached a peak in 1930. In South Carolina, Georgia and Alabama, however, the industry continued to grow until 1935. There has been in recent years a tendency for Virginia and North Carolina to lose plants to the deep South in the same way that New England originally lost them to Virginia and North Carolina.

[16] The average southern cotton mill has about 30,000 spindles. While some mills are much larger, it is doubtful whether expansion beyond 50,000 spindles brings any reduction in unit costs. The profits reports of the Federal Trade Commission seem to indicate that the earnings of small mills are at least as high as, and perhaps higher than, those of the largest producers. (See, for example, F.T.C., *Report on the Textile Industry,* Jan.-June, 1936.)

[17] There is an additional reason for southern opposition to production control. In a company town, the company must maintain utility and other services whether the workers are employed or not, and in addition must provide enough cash income to hold the working force together. Under these conditions labor becomes to a considerable extent a fixed cost, and any reduction in output raises unit costs considerably.

[18] It is impossible to measure exactly the amount of unused capacity in the industry because of the complications introduced by multiple-shift operation. If one assumes that all New England mills customarily worked one 8-hour shift and that one-half of the southern mills worked two 8-hour shifts, then the utilization of capacity (spindle-hours operated as a percentage of total possible spindle-hours) over the period 1924-36 was 75.8 per cent. These assumptions, however, which are those made by the Brookings Institution (E. G. Nourse, *America's Capacity to Produce,* Brookings Institution, Washington, 1934, pp. 194-202), almost certainly understate the customary working time of the industry and therefore understate the amount of unused capacity.

sufficient to restore the former profitability of the industry. Mill margins declined steadily from 1923 to 1932, recovered sharply in the last half of 1933, but sagged again from the end of 1933 to the summer of 1936.[19] During this fourteen-year period, profits in cotton textiles appear to have been no more than half those of manufacturing industry generally (Table I). While this is not conclusive proof, it is strong *prima facie* evidence of the existence of cutthroat competition.

It is desirable to distinguish in this regard between the northern and southern branches of the industry. During the years for which data are available (1925-29 and 1933-34), southern producers averaged more than 6 per cent on stockholders' investment. It is doubtful whether this constitutes cutthroat competition, particularly in view of the fact that plant capacity in the South increased appreciably during the period.[20] One can be quite certain, however, that competition has been ruinous to the New England branch of the industry. Low or negative earnings have resulted in a steady liquidation of productive capacity. The number of spindles in place in New England fell from 18 millions in 1923 to 8 millions in 1937. Though a small number of spindles and looms have been moved south and reërected, most of this reduction represents actual scrapping of machinery, with buildings left vacant or rented to new users.

The experience of the industry during the past fifteen years may now be summarized. The development of excess capacity in the early twenties brought low earnings, which could be increased only by controlling production or by reducing plant capacity. For reasons already indicated, control proved impossible and events took the latter course. Under the pressure of shrinking processors' margins, elimination of marginal mills went steadily forward. The total number of spindles in place fell from a peak of 38 millions in 1925 to 27 millions in 1938. Available estimates indicate that the process of liquidation is nearing its end; and that the capacity of the industry is now only slightly in excess of probable future sales.[21]

[19] "Mill margin" is the difference between the price of a pound of a specified grade of print cloth (in this case, 38.5 inches, 64 x 60, 5.35) and the cost of the cotton contained in the cloth. It indicates, in other words, the amount which the manufacturer receives to cover his operating expenses and yield a profit. The margin on the standard grade of cloth noted above fell from 22.5 cents per pound in 1923, to 18.0 cents in 1929, to 9.9 cents at the beginning of 1933. After recovering to 23 cents at the end of 1933 it fell off once more, and reached 14 cents in the spring of 1936.

[20] The fact that total investment increased, however, does not necessarily prove that profits were more than "normal." In a family business such as cotton textiles, ownership of capital is closely associated with the possession of managerial skills. It is the return to the capitalist-plus-manager which must be maximized. A displaced New England cotton manufacturer might gain by building a new plant in the South, even if the return on capital alone were less than he could have obtained elsewhere.

[21] It has been estimated that, if the average consumption of cotton goods from 1915-36 be taken as "normal," this demand could be satisfied by 21 million spindles operating 80 hours per week. (C. T. Main, *op. cit.*, pp. 9-13.) Since the number of *active* spindles in March, 1938, was only 24 millions, and since some margin is required to care for seasonal and cyclical peaks, it would seem that excess capacity has been largely eliminated.

Competition has thus performed, though tardily and haphazardly, its traditional function of adjusting productive capacity to effective demand. The process of adjustment, of course, has been painful for many of those connected with the industry. The chief losers have not been the owners of New England mills, whose investments had in most cases been thoroughly amortized from previous earnings, but the New England textile workers. The closing of the mills has thrown some 100,000 New England workers out of employment, and large numbers of these workers are still unemployed.[22]

III

It is frequently asserted that Adam Smith's "invisible hand," if not enfeebled from birth, has at any rate suffered a paralytic stroke in recent years. The experience of the cotton textile industry suggests that such an extreme view is untenable. It is possible for excess capacity to be eliminated through a competitive catharsis. It would be rash, however, to conclude from a single case that excess capacity will always be eliminated if competition is allowed to continue. Theory and observation both suggest that the adjustment of capacity may under certain conditions be postponed indefinitely.

It is important to distinguish between conditions which merely retard adjustment and conditions which are capable of preventing adjustment. The retarding factors, which arise chiefly from the rigidity of capital equipment, are now so well known that they need not be discussed here.[23] The possibility that adjustment may be prevented, on the other hand, arises chiefly from the imperfection of the labor market. This aspect of competition has received relatively little attention, and deserves a brief comment.

The supply function of labor to the individual firm is probably discontinuous in most actual cases. It is likely to be very elastic upward, particularly if there is unemployment in the locality. In the downward direction, however, it may be very inelastic for a considerable distance. The supply curve is hinged, as it were, about a point representing the present level of wages and employment in the plant. The downward elasticity, of course,

[22] In November, 1937, 36 per cent of all gainfully employable persons in Lowell, Massachusetts, were totally unemployed, 35 per cent in Fall River, 41 per cent in New Bedford. The figure for Massachusetts as a whole was only 22 per cent. (Computed from returns of the 1937 unemployment census on the assumption that three-quarters of the totally unemployed filed returns, and that the number of gainfully employed in Massachusetts increased by 8 per cent between 1930 and 1937.)

[23] They include the durability and specialization of equipment, the differing life spans of different machines, the impossibility in many cases of closing down part of a plant, the fact that in a corporate system low earnings do not necessarily induce directors to disinvest. The possibility of corporate reorganization, included by some writers in the list of retarding factors, should not be included for the reasons given above.

Pioneer work on these matters has been done by J. M. Clark, *The Economics of Overhead Costs*, Univ. of Chicago Press, Chicago, 1923. See also Eliot Jones, "Is Competition in Industry Ruinous?", *Quart. Jour. of Econ.*, 1919-20, p. 473.

will vary with the number of alternative opportunities for employment, and with the period of time considered.

Not only is exploitation[24] of labor possible under these conditions, but the degree of exploitation[25] is likely to vary among different plants in an industry and among different geographic areas. This situation tends to create excess capacity by encouraging the building of plants in places where the degree of exploitation is particularly high, although profits in the industry are no more than normal and the places concerned have no genuine productive advantages. Even if the expansion of an industry into a new area is justified by genuine economies, a high degree of exploitation in that area may make the expansion greater than it otherwise would have been. The excess capacity which necessarily arises in such cases is thus intensified.

Whether labor's exploitability can contribute to the *perpetuation* of excess capacity depends on whether employers normally take full advantage of their possibilities of exploitation. If they do not, as seems likely in practice,[26] then the possibility of additional wage cuts is always present. In any industry where excess capacity has developed, at least part of the producers will be able to avoid the incidence of falling prices by cutting wages. Firms which would otherwise have been eliminated are thereby kept in production, and excess capacity is perpetuated.[27] The self-adjusting mechanism of classical theory depended on producers being ground between falling prices and rigid cost functions. If wages can be cut and cost curves lowered at will, the bottom drops out of this apparatus. An incidental result is that those firms which are eliminated are not necessarily the least efficient, but may be those whose labor supply curves are most elastic. Firms located in cities with diversified industries, for example, may be in a poorer position to withstand cutthroat competition than firms in one-industry towns which have no close competitors for the available labor supply.

The existence of widespread and continuous unemployment may also

[24] As used here, this term is identical with the "monopsonistic exploitation" of Joan Robinson (see *Economics of Imperfect Competition,* Macmillan, London, 1934, pp. 281-83 and 292-97). It will be noted, however, that I hold a different view of the probable shape of the labor supply curve to the individual firm, which is presented as a continuous function by Mrs. Robinson.

[25] The degree of exploitation might perhaps be measured by the difference between the marginal value product and the rate of wages, taken as a percentage of the marginal value product.

[26] It is well known that many employers pay wages well above the bare minimum which would hold their working force together because they desire public approval, or the goodwill of their workers, or freedom from union activity. Wages in these plants will be cut to the minimum only under the pressure of falling prices and shrinking profits.

[27] If by reducing wages below the prevailing level for similar work all firms in the industry are enabled once more to earn normal profits, it may be contended that cutthroat competition has been eliminated. It seems more accurate, however, to say that excess capacity and cutthroat competition still exist, but that their incidence has been transferred to wage earners instead of being borne by the return on capital.

enable cutthroat competition to continue indefinitely. Under these conditions many of the unemployed will try to establish themselves in industries, which require little capital, such as baking, the garment industries, printing, building construction, retailing, and the repair and service trades. These men require no return on their meager investment, and are willing to work long hours for sums little greater than could be obtained on relief. Although their methods of production may be relatively inefficient, they are able to sell at prices low enough to attract business from larger and more efficient establishments, which then find themselves with excess capacity and subnormal earnings. This sort of situation does not correct itself automatically. If some of the larger establishments are forced out of existence as a result of their rigid cost structures, and if some of the small men do fail through mismanagement or insufficient capital, their places will quickly be filled by others who prefer work at low wages to unemployment.

It is clear, then, that cutthroat competition may in some cases assume the proportions of a chronic illness.[28] The remedy usually proposed by producers is the fixing of a minimum price sufficient to cover "cost" or "cost plus a reasonable profit." The surface attractiveness of this remedy rests on its ambiguity, and disappears as soon as one inquires what is meant by "cost." Who is to determine cost? If this is left to the producers, as it must be unless the government is prepared to employ a large staff of accountants, the result is to give them virtually a blank check. Whose costs are to be taken as the basis for price fixing? The unit costs of different producers in the same industry may easily differ by twenty or twenty-five per cent. If the choice is left to producers, there will be a strong tendency to fix a price high enough to cover the costs of the least efficient firms. Are average costs or marginal costs to be used? The tendency of producers to think in terms of average cost may lead to the fixing of a price too high to permit the most desirable utilization of plant capacity. When to these objections is added the high cost of adequate enforcement, there is a strong presumption against embarking on such plans.

While it is not the purpose of this paper to elaborate a positive policy toward cutthroat competition, a few suggestions may be made. Anything which helps to prevent wage rates from falling below marginal value product will help to prevent excess capacity from developing and persisting through the exploitation of labor. Provision of information concerning job opportunities, financial aids to mobility, the development of unions, minimum-wage legislation, and reduction of unemployment can all be helpful in this connection.

The alleviation of general unemployment would also prevent the flooding of the merchandising, handicraft and service occupations which was pointed

[28] Such a conclusion, of course, is in no sense a contradiction of classical theories concerning the consequences of competition under conditions of full employment and perfect markets.

out above. The concentration of an unduly large part of the labor force in these industries is poor social economy. Yet it is probably better to have men employed inefficiently than not employed at all.[29] The only genuine remedy for the situation is a recovery of production which will draw men out of occupations into which they have been forced during the past decade and in which their productivity is relatively low.

In the absence of rapid economic expansion, cutthroat competition will develop frequently, last for long periods of time, and in some cases persist indefinitely. The direct approach to the problem through price fixing, however, is likely to do much more harm than good. The effective measures, from the public standpoint, are mostly indirect. They lie partly in the field of wage policy, partly in the field of cycle policy. The problem thus overlaps and merges with the larger problem of how to maintain full utilization of resources in an expanding economy.

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[29] It would therefore be undesirable to bar unemployed men even from occupations in which returns are relatively low. In some cases, indeed, the unemployed can drive down wage rates and secure employment only by setting up as independent entrepreneurs. In building construction, where the insistence of the trade unions on high hourly rates and of contractors on wide profit margins has kept the price of buildings and repairs relatively high, many carpenters, painters, etc., have turned contractor and offered to do the work for relatively low wages. This has undoubtedly tended to deflate building costs and to increase the volume of construction.

SOME CHARACTERISTICS OF SAVINGS DEPOSITS

In this paper various characteristics of savings deposits are studied in order to clarify the functions of these deposits. (1) In the late 1920's many deposits were withdrawn for the purchase of stocks and other investments. During the 1930's, as a rule, deposits were not used for current spending on consumption to the extent commonly supposed. In one depressed area, however, spending and unemployment were the main reasons for withdrawal. (2) The activity of savings deposits is marked by sharp seasonal fluctuations, but the annual rate of turnover is more stable than that for demand deposits. Medium-sized balances ($400-800) are the most active. (3) The data indicate that over 40 per cent of accounts are closed before becoming a year old. Older and larger accounts, however, make up a large part of total deposits. (4) These data emphasize the need for a time period in the definition of savings, since many deposits are used for non-current spending. The use of savings deposits as investments, however, seems to be increasing.

In this paper certain characteristics of the deposits in the mutual savings banks of New York State are considered. The purpose of the investigation is to acquire a clearer notion of the nature of savings deposits. The principal characteristics considered are the uses of saved funds, and the activity and age of accounts. For the most part, data concerning these questions are not obtainable for all banks, but it happens that internal studies made by a few of the banks in the state are pertinent to this inquiry, and are believed to be representative of other banks. These studies have been supplemented by statistics published in the *Annual Reports* of the Superintendent of Banks and by discussions with savings-bank officers.

A. Uses of Savings Deposits

It is virtually impossible to determine accurately the reasons for savings-bank withdrawals. This is so because deposits usually are withdrawn in cash, which cannot be traced. Sometimes, however, withdrawals take the form of checks drawn by the savings banks on depository commercial banks, especially when the amounts are large, and the endorsements on these checks provide clues to the uses of the money. Several individual banks made studies of these endorsements covering short periods of the late 1920's in order to discover to what extent deposits were being used for stock purchases. These studies showed quite conclusively that savings deposits were attracted in large amounts to the stock market or to investment in mortgage certificates and other securities.

One bank, for example, discovered that in January, 1929, 24 per cent of the withdrawals by check were used to purchase stocks and bonds, while 40 per cent went into real estate or mortgages. In March, 40 per cent went for stocks and bonds and 37 per cent for real estate or mortgages.[1] When compared to stock-market movements, the rise and fall of withdrawals

[1] These data were collected by the Savings Banks Association of the State of New York. Although these figures come from only one (large) bank, several others found similar results and savings-bank officials believe them to be typical in the metropolitan area.

seem to indicate that funds are withdrawn at times for the purchase of securities and at other times to meet margin requirements.[2]

One metropolitan bank has attempted to discover the reasons for closed accounts and for withdrawals by check for most of the period since 1928. From April, 1937, to July, 1938, the total amount withdrawn by check and endorsed by investment concerns totalled nearly $717,000 for this one bank. No other kind of endorsement was nearly as large, the next largest being the post office, presumably for postal savings and immigrants' remittances. Withdrawals by check from this bank were made up as follows during this period:

TABLE I
USES OF FUNDS WITHDRAWN BY CHECK
ONE LARGE BANK, APRIL, 1937-JULY, 1938

Destination	*Amount*	*Per cent*
U. S. savings bonds	$ 13,605	1.58
Savings and loan associations	44,569	5.18
Post office	85,364	9.92
"Wall Street"	716,842	83.32
Total	$860,380	100.00

As to other purposes to which savings depositors put their money, there is less information as far as amounts are concerned. The same New York bank has, however, investigated the reasons, as far as possible, why accounts have been closed out. These figures do not, therefore, indicate why depositors withdrew funds unless the whole account was withdrawn. In addition, it is doubtful whether the representative of the bank was in all cases able to discover the true reason for the withdrawals. Nevertheless, it is likely that the following figures show fairly well why savings have been withdrawn in this locality. The figures cover the period from January, 1929, to July, 1938, with the exception of 1935 and the last 10 months of 1934.

It may be assumed that money withdrawn because of unemployment was spent. Probably a large part of the "miscellaneous" category also might be included in "spending." "Family and Legal Trouble" also would apparently mean that the money was spent. Altogether, therefore, it is safe to assume that well over half of the accounts closed were spent. Perhaps 10 per cent of the closed accounts were used in the depositors' business or for

[2] A multiple correlation analysis of withdrawals, stock prices and stock sales was made but was expectedly inconclusive; expectedly because there are reasons for withdrawals to increase with either rising or falling prices, and sales may be large in either case. Compare Keynes, *Treatise on Money,* ii, 250-251, "Now when bullish sentiment is on the increase there will be a tendency for the savings deposits to fall." Margin requirements provide a tendency for them to fall at other times too.

TABLE II
REASONS FOR CLOSED ACCOUNTS

Reasons	Number	Per cent
For spending	12,384	24.04
Unemployed	12,331	23.95
Leaving city	8,857	17.20
Investment or business	5,061	9.83
Inconvenient location of bank	4,880	9.48
Have other accounts	3,403	6.66
Miscellaneous[1]	3,252	6.31
Family and legal trouble	1,304	2.53
Total	51,472	100.00

[1] Includes "no reason given."

the purchase of other investments. Probably a large part of the other withdrawals was redeposited in other banks, including some of those withdrawn because the depositor was leaving the city, because the bank was inconveniently located, or because the depositors had other accounts elsewhere.

As might be expected, these various categories of withdrawals show cyclical tendencies. Withdrawals because of unemployment averaged less than 28 a month in this bank during 1929, began to rise in 1930, and reached a peak of 903 for the second quarter of 1932 (301 per month). The abrupt drop in the withdrawals for this reason during 1933 probably occurred because the deposits of the unemployed were by then nearly used up. Withdrawals because of unemployment averaged only 93 per month in the early part of 1934. There was a second increase in withdrawals because of unemployment after the middle of 1937, reflecting the recession of that year.

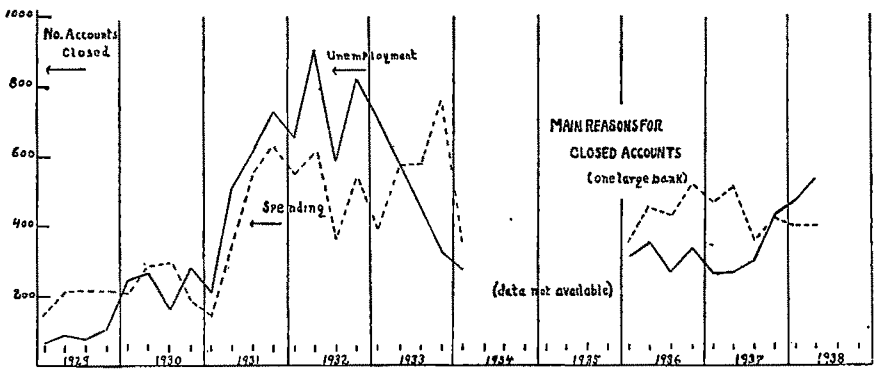
Some similarities in the curves for withdrawals because of unemployment and those for spending suggest that there may be some overlapping in the data. Withdrawals for spending rose gradually during 1929 and 1930, and then fell off during the second half of 1930. This drop may have reflected a growing feeling of caution and fear of the future on the part of the public. During 1931, however, these withdrawals rose rapidly, from 144 in the first quarter of 1931 to 615 in the second quarter of 1932. An uneven increase then took place which culminated in the last quarter of 1933 with 760 accounts closed. The coincidence of this high figure with a low figure for withdrawals because of unemployment may mean that some of the reasons given as "spending" might have really been "unemployment." Further plausible explanations are: fear of inflation, rehabilitation of homes under governmental urging, and the "Buy Now" program.[3]

[3] One other item in this grouping may deserve mention because of its behavior; namely, the withdrawals because the depositor was leaving the city (not included in Chart I).

It should be remembered, of course, that the data here considered describe the withdrawals from only one bank. It is natural to expect different experiences in other banks. This particular bank happens to be located in a section of New York that is apparently losing a considerable amount of its past economic importance; hence it is to be expected that total withdrawals should be relatively large. Especially those caused by unemployment, by the depositor leaving the city, and by the inconvenient location of the bank, should be larger than elsewhere.

One of the principal differences noted, when observing all banks, is that the deposit and withdrawal figures for all the savings banks in New York State provide the rather surprising conclusion that funds were not with-

CHART I



drawn in any appreciably increased volume during the 1933 depression. The total volume of deposits actually increased from $4,463,046,000 in 1929 to $5,139,593,000 in 1934, and further, the amounts withdrawn monthly did not increase appreciably in any month except March, 1933. The monthly pattern of withdrawals remained very much the same as before the depression.[4] Both withdrawals and deposits followed the usual monthly swings (being large in January, April, July and October), but in smaller volume.[5]

There was a fairly rapid, although uneven, decline in the number of accounts closed for this reason, from about 135 a month in 1929 to 60 a month in 1933. This may have meant that people were unable to leave their homes after the depression was well under way because unemployment was as bad in other areas, because they lacked funds to move, because of a general fear of new attempts in depressed periods, or similar reasons. The figures indicate that the depression did not cause a very considerable migration among savings depositors.

[4] This point is further developed, but with particular reference to the problem of reserves, in Welfling, *Savings Banking in New York State*, ch. x, with supporting charts and data. (Duke University Press, 1939.) The Superintendent of Banks publishes figures for annual withdrawals (*Annual Reports*). The Savings Banks Association of the State of New York collects data on monthly deposits and withdrawals.

[5] The explanation for the quarterly peaks of withdrawals is that many payments fall due on these dates, and certain seasonal expenditures such as house repair, taxes, purchase

This failure of withdrawals to increase leads to the conclusion that, on the whole, savings-bank depositors did not live on accumulated savings during the depression. Of course, it is true that while withdrawals continued somewhat below the pre-depression level the funds may have been withdrawn for different (emergency) purposes, but it would appear that if there were any widespread use of savings for consumption purposes the amounts withdrawn would have increased. It is more likely that the decline in monthly deposits indicated that depositors were consuming a larger part of their reduced incomes, and also that savings were being hoarded rather than deposited. Such a conclusion is strengthened by the fact that, generally speaking, savings-bank depositors are not people of the lowest-income groups, although neither are they predominantly high-income groups. It would seem likely, therefore, that the kind of person who maintained a savings account was not as likely to be unemployed as one who did not; and conversely, most of the unemployed apparently did not have accumulated funds to be drawn upon.[6]

B. Activity of Accounts

Besides the reasons for withdrawals, it is also pertinent to consider the frequency of withdrawals and of deposits. Naturally, changes in the uses of funds may create differences in the activity of accounts. For example, during 1928 and 1929 withdrawals increased rather sharply in many of the savings banks in New York, and as has been suggested above, the reason for many of the withdrawals was that the money was being put in the stock market. There was also a period of heavy withdrawals coincident with the stock market crash in the autumn of 1929. Savings-bank officers explain these withdrawals by the need for funds to meet margin requirements, and a short period of panic in which depositors feared for the safety of their deposits.

With regard to the activity of savings-bank deposits, two characteristics at once become apparent. There is, first, the marked seasonal movement of both deposits and withdrawals mentioned above, which need not be repeated here. Second, as might be expected, the activity of accounts is ordinarily less than that of checking accounts in commercial banks, and also less than that of time deposits in commercial banks.[7] The federal reserve

of clothing and vacations coincide with them. Receipt of interest and dividends helps swell deposits at these times, and new deposits are begun in order to collect dividends over a full period. This similarity in the fluctuations of deposits and withdrawals makes the discrepancy between them small and permits banks to maintain very low reserves. One or two per cent is frequently sufficient.

[6] This conclusion in turn would be substantiated by figures relative to the savings of low-income groups presented by Leven, Moulton and Warburton, *America's Capacity to Consume* (Review of Reviews Corporation 1934). *Cf.* their chart on p. 97.

[7] The Committee on Bank Reserves of the Federal Reserve Board in 1931 studied time deposits in commercial banks and concluded that many of them were funds which were to

figure for demand deposits in 141 cities fluctuated between 40 and 60 from 1919 to 1928, that is, demand deposits turned over between 40 and 60 times a year. Savings deposits, on the whole, have never turned over as often as once a year.[8] The percentage of savings deposits withdrawn in any year between 1919 and 1928 was between 29 and 33.

The rate of turnover of demand deposits is also more subject to change than is that for savings deposits. This conclusion is more clearly brought out by the figures after 1928. Whereas the rate of turnover for demand deposits went well above 80 and 90 in 1929 and 1930, the rate for savings deposits barely reached 0.4—that is, 40 per cent of the average amount on deposit in 1929 was withdrawn during that year. In the depression, the rate for demand deposits dropped below 25 in 1932, or by more than two-thirds, while the rate for savings deposits declined only slightly in 1932 and 1933, and continued to fall slowly to about 0.25 in 1935.

The activity of accounts may also be related to the average size of accounts. Internal studies which have been made on this problem indicate that the most active accounts are those consisting of medium-sized balances, *i.e.,* from $400 to $800. Usually very small accounts and very large ones are relatively inactive. The small accounts are so numerous, however, that they make up a large share of the total accounts and of the total transactions. For example, in one large New York City bank, the deposit liability for accounts under $500 was about 6 per cent of the total, and the active accounts in this group made up 3 per cent of all active accounts, but this 3 per cent had approximately 55 per cent in amount of all transactions (deposits and withdrawals) recorded. In number, the accounts for less than $500 constituted 49.72 per cent of the total and included 21.33 per cent of all active accounts. Hence 21.33 per cent of the active accounts made up over half of the activity.

C. Age and Mortality of Accounts

The age of accounts is important for several reasons. Such data throw light on the savings habits of the public, as well as on the profitability of various accounts to the banks. The following table shows the age of accounts closed at one metropolitan bank during the month of April, 1938.

From these figures it is evident that a large portion of newly-opened accounts are closed before they have been in the banks a year.[9] These make up the costly element of deposits, along with those that are not closed out

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be used shortly in business, and which were considered by depositors to be as readily obtainable as demand deposits.

[8] However, some of the individual accounts are much more active than this average, but since they are usually small they do not greatly affect the average.

[9] The same conclusion is reached in another way from figures from another large bank; 3.14 per cent of the accounts less than a year old were closed, as were 0.80 per cent of those from three to five years and 0.67 per cent of those ten years and over.

completely, but are very active. The figures also substantiate the opinion that a great deal of the total saving is done to acquire balances with which to purchase consumer goods or investments. In this bank, 73.77 per cent of the accounts were closed before they were five years old.

TABLE III
AGE OF ACCOUNTS CLOSED

Age	*Number*	*Per cent*
Less than one year	278	43.17
One to two years	80	12.43
Two to five years	117	18.17
Five to ten years	61	9.47
Ten to fifteen years	71	11.02
Fifteen to twenty years	18	12.79
Twenty years and over	19	2.95

The bank from which these figures were taken is also able to provide further figures on the age of all accounts in the bank on April 1, 1938. In Table IV these figures are presented in four-year periods (except that those before 1916 are lumped together and the latest period contains less than four years).

TABLE IV
AGE OF OPEN ACCOUNTS

Age in years (inclusive)	*Per cent of accounts*	*Per cent of deposits*
46 to 23	5.06	10.28
19 to 22	4.35	7.61
15 to 18	9.57	12.01
11 to 14	17.22	20.08
7 to 10	17.08	14.13
3 to 6	20.85	20.19
0 to 2	25.87	15.70
	100.00	100.00

These figures show a clear tendency for the older accounts to be fewer in number, but the tendency is not so clear for the older accounts to make up a diminishing proportion of the funds on deposit. Here there is a conflict between the tendency for the funds to accumulate, both with dividends credited to accounts and with new deposits, and the tendency for deposits to be withdrawn after being in the bank for a relatively short time. It may be noted that 10 per cent of the deposits had been in the bank since 1915, or 23 years, while 15 per cent of the deposits had been made during the preceding 24 months. A further breakdown of the figures reveals that the number of accounts made in a particular year since 1923 and remaining

in the bank until April 1, 1938, was least in 1928, 1929 and 1930. The percentage of accounts deposited in those years and still remaining at the end of the study varied between 3 and 4 per cent. More than 6 per cent of the accounts opened in 1931 remained in the bank. These figures would indicate that to some extent people who began to save toward the end of the boom period soon found it impossible to continue.

Conclusions

The data discussed above may serve, first, to throw some light on the problem of what proportion of new savings deposits are to be considered as true savings. There is usually little doubt that the deposits in savings banks represent saved funds, although it is widely recognized that a large part of the time deposits in commercial banks should not be so considered. Probably the primary problem is to arrive at a satisfactory definition of savings. In this connection the data emphasize the importance of the time period considered when distinguishing saving from consumption. In other words, since a large part of the funds in savings deposits are amassed for non-current spending, they are not clearly savings unless a time interval is chosen in such a way that the funds are accumulated in one interval and spent in another.

A man may have, for example, a tax bill of $120 a year. He may pay the bill out of his current income in the month the bill is due, or he may "save" $10 a month throughout the year. He is apparently in the same position at the end of the year in either case, except that in the latter he may accumulate a small amount of interest on the deposit. The mention of interest raises the question of the relationship of saving and investment; it implies that the depositor's funds have been invested. Here the data on deposits and withdrawals provide a further conclusion concerning savings deposits. In this particular example, there can be no more total investment from the accumulation of $10 a month, because at the end of the year the deposit is withdrawn, and if it has been invested, the investment must be liquidated. However, what actually happens, on balance, is that withdrawals are met by concurrent new deposits, which permit the continued investment of the previous deposits, but cannot themselves be invested.

The total volume of savings deposits, therefore, is a revolving fund which is permitted to remain almost entirely[10] invested because new deposits currently offset withdrawals. The figures presented above indicate that the deposits most generally thought of as long-term accumulations are frequently built up with the idea of withdrawal in the near future for some item of expenditure. So-called "rainy-day" savings are in evidence, but are doubtless much less in the aggregate than is commonly supposed.

[10] Not entirely because of reserves.

While a large part of the total deposits is made up of single deposits of over $7,000, and, in turn, a large part of these deposits is relatively inactive and unused, smaller accounts are more numerous and more active. That is, few people have savings accounts of even average size, and few of these are able or willing to allow the savings deposits to accumulate to large sizes. On balance, therefore, the monetary savings evidenced by savings-bank deposits are to a large extent revolving funds for irregular expenditure. A very large part of the deposits in savings banks, therefore, do not add to the capital of society; they only permit the continued investment of previous deposits.

Up until the last decade total deposits increased at approximately the same rate as dividends were earned and credited to accounts, plus a slight excess of deposits over withdrawals. In other words, deposits comprised a revolving fund that was growing gradually. The extent, then, to which savings deposits increased the capital of society was only a little greater than the interest earned on past savings. In recent years, the volume of savings-bank deposits has been relatively stable at approximately 10 billion dollars. This means that withdrawals have equaled deposits plus dividend credits, which average about two per cent and hence new deposits in savings banks have not represented any increase in capital accumulation.

In connection with the data of this paper, reference may be made to the problem of whether savings deposits should be considered as money. The two sides of this problem usually take these forms: (a) some hold that these deposits are not money because they cannot be spent before being converted into cash or demand deposits,[11] and (b) others argue that savings (or time) deposits are so nearly like demand deposits that it is "splitting hairs" to attempt to distinguish them. Two points are raised in support of the latter view: first, that in many cases time deposits have been subject to check so that they are merely demand deposits with low velocities; second, they perform the same function as demand deposits when serving as a liquid reserve. Professor Schumpeter, for example, argues that "the bulk of time deposits in commercial banks and a great part of the time deposits in savings institutions" are money because they "served exactly the same purpose as demand deposits" for their holders.[12] Here he apparently refers to the ability of savings deposits to serve as liquid reserves, since shortly thereafter he adds, "whoever holds that kind of an asset will behave differently with respect to his demand balances, in particular, feel much less constrained . . . to keep an emergency reserve."

If money is defined as something which may be spent, then those time deposits subject to check qualify as money and the others do not. In the

[11] See L. Currie, *Supply and Control of Money in the United States*, p. 14.

[12] J. Schumpeter, *Business Cycles*, vol. ii, pp. 851-852.

immediate case, savings deposits in mutual savings banks could not qualify because the depositor must, according to law, be present to make a withdrawal, which takes the form of currency or a check on a depository. If a method were devised whereby savings deposits could be transferred from person to person they could be used directly to purchase goods and to pay debts. Such a system is easy to imagine, even though the deposits might be subject to a 60-day notice (a check might be written and discounted, for example). The result would be an increase in the volume of spendable money and, presumably, a decreased use of existing money.[13]

To call a savings deposit money because it is a liquid reserve always raises the question of where to draw the line between money and investments. In this case, for example, a United States savings bond has the same characteristics of stable dollar value and interest accumulation as savings deposits (because it is redeemable rather than saleable). The ownership of savings bonds, as well as of a savings deposit, would probably lead a person to keep less reserve in the form of money, but they are considered investments rather than money.

The figures presented above may serve to illustrate to what extent savings deposits are maintained primarily as investments, or frequently converted into money—in which case they approach being money in the minds of their owners. First, most deposits are very small and are accumulated for some "large" expenditure or investment. This tendency is more apparent now than before 1929, when monthly deposits and withdrawals were both larger, and indicates an increased (relative) use of deposits for reserve purposes. Items of expenditure are larger and less frequent. Second, deposits did not seem to be withdrawn appreciably for consumption during the depression. If this is true it would indicate that depositors considered their deposits as not for consumption, and were able to keep them for other purposes in spite of the depression. Third, a few very large accounts make up most of the amount on deposit. Some of these are seldom withdrawn, while others shift in and out of the banks in response to other investment opportunities. In other words, the owners of the latter shift from one type of earning asset to another—from one that does not depreciate to one that has depreciated.[14]

Finally, an analysis of savings deposits also leads to certain conclusions with respect to a social security program. It would indicate that, in general, that part of the population most likely to benefit from a social security

[13] Something similar to this has taken place in those savings banks which have arranged to pay depositors' utility bills for them. Differences in reserve requirements are ignored here.

[14] See Keynes, *Treatise on Money*, pp. 140-146, for a discussion of the effect of this shifting on the price level of investments. The early literature on savings banks bears frequent reference to "capitalists" who sold securities at high prices and deposited the proceeds in savings accounts for withdrawal when security prices were lower.

A REËXAMINATION OF THE CLASSICAL THEORY OF INFLATION

An adequate analysis of the classical theory of inflation cannot afford to neglect the following points: (a) The structure of economic society, more particularly of industrial production, was not fully integrated by the turn of the eighteenth century. (b) The general economic theory formulated at that time concentrated on the problem of production in accordance with the concrete major problem of its time. (c) The "received doctrine" concerning money had been formulated under mercantile conditions based on a manufactural and not an industrial mode of production. (d) The general circumstances occasioned by the jerkingly proceeding industrial expansion, enhanced by the specific conditions of the Anglo-French wars, resulted in an apparently general rise of prices.

As to the functional value of a theory developed on this basis and proposed to be applied to the solution of modern monetary problems, we have to recognize that: (a) The analysis of this rise of prices was carried on with the help of a scientific method which did not and could not include a concept of qualitative change. Quite the contrary, "received doctrine" as well as the outward appearance of the economic process seemed to suggest a merely quantitative expansion without any fundamental qualitative change in the structure of production. (b) The result of such an attitude toward the phenomenon of rising prices was to conceive of them as deviations from an otherwise static condition. (c) Such theoretical position did not prove fatal *for that time* for the reason that the actual though temporary economic conditions tended to obscure the imminent structural change indicated in the rise of prices.

The classical theory of inflation expressed thus the phenomenal coincidence of a specific historical period. It has to be understood as a "special case" in doctrine formation created by and applicable to a special historical situation only.

By the end of the eighteenth century the industrial type of producing commodities had become prevalent, bringing in its wake a development of regular interrelationships between the various producers and consumers. Adam Smith, in his discussion of the division of labor, has given an adequate picture of that society.

There is little doubt that the theory of money would have retained its position of secondary importance in the general economic theory of that period if it had not been for the occurrence of particularly striking events which forced the political and economic strategists to concern themselves particularly with disentangling the apparently highly important flux of money. One extraordinary event was the French Revolution, which to the English merchants produced an economic-political threat of first importance. There was a definite connection between the Revolution in France and the conditions in England. In the treatises on money, concerned with the doctrines elaborated in this period, it has always been emphasized that the military expenditures during this time were of an *extraordinary* nature. There is a curious neglect of the difficulties which arose out of the structural transformation which took place in England quite irrespective of the foreign wars. It is of course perfectly true that one cannot distinguish clearly and in absolute terms between "indigenous" development and "influences from the outside." It amounts to a tautology, today, to say that the causes of the French Revolution and the reasons for its being disliked by the

English merchants were part and parcel of the same economic phenomena by which industrial society in England developed. At the same time it is important to point out that England itself was shaken by one of the most important revolutions in human history. The tremendous increase in productive capacity, the increase in population, the disproportionality between income and output arising from the persistence of the Corn laws, was leading in England to a political situation which in many respects approximated the radicalism produced in the United States, as well as in France. Strikes, bread riots, and machine wrecking swept over the country, and soldiers were frequently used to suppress the disorder. In 1794 Pitt suspended habeas corpus for eight years, and Thomas Muir was sentenced to fourteen years' transportation by the notorious Justice Braxfield.

This historical development led to revolutions in America and France, but not in England. The important difference between the development in England and that in the remaining countries was that England had begun to tap the enormous potential economic wealth accessible through the industrial mode of production. England had at that time already in its hands this key to the temporary solution of the difficulties. The other nations had still to engage in the creation of the basis upon which such production was possible, a stage England had passed in the preceding years. On the other side, the very existence in England of its industrial production tended to increase the social contradictions in the remaining countries and this to a degree turned social transformations into social revolutions.

I

Hume had presented a picture of society in which there was possible a perfect harmony between money and prices as long as there were no artificial interferences on the monetary side of the equation, and as long as on the commodity side the English producers continued to make those strides for which they were eulogized by their contemporaries. Into this harmony the political events described in the introductory paragraphs came as a terrific shock. To wage wars means to support armies; and it proved to be an important point for the development of monetary theory at that time that these armies were operating outside of England. We have to add here that by armies we do not mean only the English armies operating in France, Holland and Belgium, but also the German, Austrian, Italian, Sicilian operations against France. The direct loans made, according to Silberling,[1] ran into several millions of English pounds. The amounts nearly reached the staggering sum of 60 million pounds.[2] In the same table of Silberling we also find the figures covering the expenditures for

[1] Norman J. Silberling, "Financial and Monetary Policy of Great Britain during the Napoleonic Wars," *Quart. Jour. of Econ.*, vol. 38, p. 225.
[2] *Ibid.*, p. 227.

the British armies in Europe. These payments to foreign countries were in many respects similar to the credits that were made available to Poland, Rumania, Greece, and Turkey by Mr. Chamberlain in 1939. Professor Silberling has also made extensive investigations of the actual physical transfers of the earlier time.[3] The volume of the extraordinary remittances is thus approximately known, also the source of these remittances.[4]

Why had the premium for precious metals risen above par? This question was of major importance to English foreign trade inasmuch as it not only made foreign goods more expensive in England at a time when large imports were of primary importance to England because of the war situation, as well as the generally increasing needs for supplementary foodstuffs because of bad harvests, but also because England's trade with India was based on large exports of silver, the acquisition of which now proved to be more expensive. It is therefore a rather curious position in which the leading English financiers found themselves during this time. On the one hand, there was no question about the necessity of carrying on the war against the French, and little opposition appeared, therefore, against the need of the government for large loans or the increase in taxes, just so the latter was predominantly indirect taxation, which would be least burdensome for the financiers. But while all this was true, they were considerably put out when this war finance began to be accompanied by a premium on precious metals over the English paper currency.

II

Boyd in his letter to Pitt[5] said that "the premium on bullion, the low rate of exchange, and the high prices of commodities in general (are to be regarded as) . . . symptoms and effects of the superabundance of paper." Thornton argued similarly in his "Paper Credit."[6] He elaborates the case of an increase in the volume of currency and shows that such an increase must necessarily lead to an increase in the prices at home as well as to a premium on bullion.

> Bullion is a commodity . . . and it rises and falls in value on the same principle as all other commodities. It becomes, like them, dear in proportion as the circulating medium for which it is exchanged is rendered cheap, and cheap in proportion as the circulating medium is rendered dear.[7]

From this it follows that

> There arises that temptation . . . either to convert back into bullion and then to

[3] *Op. cit.,* 214-233; also, by the same author, "British Prices and Business Cycles" in *Rev. of Econ. Stat.,* in prel. vol. v, suppl. no. 2, Oct., 1923, pp. 233-261.

[4] Silberling, *op. cit.,* p. 217.

[5] Boyd, *Letter to Pitt,* 2nd ed., 1801, preface, p. xxxi.

[6] *An Enquiry into the Nature and Effects of the Paper Credit of Great Britain,* by Henry Thornton, M.P., London, 1802, especially chap. 8, p. 192, *ff.*

[7] *Ibid.,* p. 202.

export; or, which is the same thing, to export and convert back into bullion; or, which is also the same thing, to convert back into bullion, and then sell to the bank, at the price which would be gained by exportation, that gold which the bank has purchased, and has converted from bullion into coin. In this manner an increase of paper . . . contributes to produce an excess of the market price above the mint price of gold and to prevent, therefore, the introduction of a proper supply of it into the Bank of England.[8]

Thornton argues extensively against Adam Smith, whom he blames for having explained a possible premium of bullion over the mint price exclusively as "something in the state of the coin."[9] Thornton makes, however, a second and more important attack against the theory of international exchange of Adam Smith. Adam Smith had pointed out that in the case of an excess issue, paper would be changed into coin and coin be exported. Thornton shows that every increase in paper would increase the price of goods, "which advanced price of goods affords employment to a larger quantity of circulating medium, so that the circulation can never be said to be over full." On the basis of this statement, Thornton makes the inference that from Smith's explanation we are led to believe that "the expense of restoring it consists merely in the charge of collecting it and transporting it from the place to which it is gone."[10] He points out that aside from the expenses, the gold may have to be purchased

at a loss, and at a loss which may be either more or less considerable; a circumstance of great importance in the question. If this loss should ever become extremely great, the difficulties of restoring the value of our paper might not easily be surmounted, and a current discount or difference between the coin and paper of the country would scarcely be avoidable.[11]

Thornton, however, does not say that Smith argued the case of an advisable policy for a bank *within a country*. Smith did not argue this case on an international basis because at his time few problems, if any, of this type were found in the *international* monetary relations. Thornton is unaware of the fact that he argues the point of an excess issue as it occurred at his time, and that the conditions which led to this excess were by no means as general and valid for all times as he presupposed.[12]

We find it difficult to pronounce judgment in the manner of previous investigators of this period, but rather feel constrained to say that every one of the writers was concerned with problems *of his time*, and in consequence *had to be* at variance with the pronouncements of *earlier* writers who had been occupied with *their* problems. If we wish to distinguish

[8] *Ibid.*, p. 203.

[9] *Ibid.*, p. 205; *cf.*, also, Adam Smith, *Inquiry into the Nature and Cause of the Wealth of Nations*, 4th ed., Vol. I, p. 69. Also, 451, Vol. II, Book IV, Chap. 6, pp. 333-335.

[10] Thornton, *op. cit.*, p. 211.

[11] *Ibid.*, pp. 211-212.

[12] Ricardo has made somewhat similar comment on Thornton's argument (*High Price of Bullion*, etc., p. 277).

between right and wrong explanations, we have to refer either to contemporaneous writers who hold different opinions upon the same subject matter at the same time; or we have to account for the economic structural changes which have taken place meanwhile.

To come back to Thornton: he makes it quite clear that in his analysis he is concerned with the maintenance of a certain value of money and is concerned with "the difficulties of restoring the value of our paper." That, however, was decidedly not the interest of Adam Smith. He was primarily interested in the preservation of an adequate relation between prices and commodities. Thornton used this argument to argue a *special* case—namely, to restore the currency to that value which, for reasons indicated above, was of important advantage to him and his group. To put it in still other words, Thornton presupposed silently a desirable value of money, the achieving of which he made the primary task of the directors of the Bank of England.

It is at this point that we wish to indicate a basic difference in the approach to the explanation of the flux of money of this period as compared to the preceding one. It seems interesting that Thornton and his fellow bullionists, aside from occasional vague remarks, do not seem to be interested in the fact that the volume of production at that time was increasing considerably. Adam Smith and Hume had been very conscious of this fact. Is it possible to discover in the economic events which had taken place meanwhile a sufficient reason for this, at least temporary, neglect of the bullionist school?

From a somewhat different angle we may call attention to the fact that most, if not all, of the bullionists were London merchants, and as such were primarily interested in foreign *trade* relations rather than domestic *production,* and that their commercial activity was intimately bound up with the price of silver. We may add that a similar attitude of these merchants can be observed in connection with the evaluation of the function of the country banks. Thornton treats this function of the country banks in a very peculiar way. At no place does he elaborate on their rôle of providing an expanding productive society with the necessary capital for such an expansion. All he is interested in is to use them as an *analogy* to international monetary relations, and in so doing, to expose them as those places in which speculative credit originated. It is not intended to offer here an *advocatio diabolica* for the country banks. Any rapid process of expansion, however, will be accompanied necessarily by speculative characteristics. But it goes much too far to center one's attention *only* on this feature in discussing the country banks. It affords no difficulty to Thornton to assume that any willingness on the side of the country banks to extend credit will be met with an adequate demand for such credit. The important thing, however, would be to point out the reasons why, in spite of the

deplored conditions of the currency, there was such a widespread optimism in the circles of the producers, because it was, after all, the producers primarily whom the country banks served. If production were expanding and, as can be shown, were expanding at a rapid rate, it is difficult to see how the expansion of credit by the country banks could lead to an inflationary increase in prices.

Not least important is, finally, the development of the credit structure within these momentous thirty years which had produced an important new economic interest, that of the long-term industrial creditor. This gradual development of credit, in the form of deferring payments as well as of silent investments, cannot be under-estimated in importance. An interest in the maintenance of a certain value of money has to come about at the moment in which the value of those contracts is endangered by rising prices. It is of secondary importance in this connection whether these rising prices were brought about by the occasion of large *extraordinary* expenditures, as, for instance, for war purposes, or as temporary discrepancies accompanying a rapid though jerking expansion in the volume of production once this production has been established as an integrated part of social life. It seems to us that we have now the clue to the attitude of the first quantity theoreticians, and their neglect of a possible grave implication of price changes.

To return to the problem of explaining the premium paid for precious metals over the mint prices and to elucidate its consequences, Thornton pointed out that a premium occasioned by a prolonged excess issue had necessarily to be abortive. The Bank would have to try to buy gold at the advanced price to be able to meet the demands for gold through the presentation of its notes. This gold would be melted by those who had obtained it, and after being melted, be bought by the Bank in order to be coined into guineas. If the Bank carries on "this sort of contest with the melters, (it) is obviously waging a very unequal war; and even though it should not be tired early, it will be likely to be tired sooner than its adversaries."[13] Or in Ricardo's words, "The Bank would be obliged, therefore, ultimately, to adopt the only remedy in their power to put a stop to the demand for guineas."[14] Ricardo argues on much the same grounds as Thornton did, correcting here and there some minor misconceptions of Thornton. He comes to the well known conclusion that the two tests to be applied in the determination of an excess issue are absolutely valid—namely, the status of the exchange quotation of the English currency with other countries, and the price of bullion. He held that because of the influence of the exchange rates on the flow of commodities and the demand for bullion, any *continuous* unfavorable exchange could be called only a depreciation of currency. While Thornton in 1802 was still in a position to leave the door open to explain the unfavorable exchange by an unfavorable balance of

[13] Thornton, *Paper Credit,* l.c., p. 125.
[14] Ricardo, *The High Price of Bullion,* etc., p. 267.

trade, Ricardo points out that the limit for the effects of an unfavorable trade "is probably 4 or 5 per cent. This will not account for a depreciation of 15 or 20 per cent."[15] According to the principles which Thornton and Ricardo held in common, this unfavorable exchange "is to be accounted for only by the depreciation of the circulating medium."[16] The remedy which Ricardo proposed was the removal of the restriction against gold payments by the Bank of England. "If the Bank were to diminish the quantity of their notes until they had increased their value 15 per cent, the restriction might be safely removed, as there would then be no temptation to export specie."[17]

The main argument then of the bullionist position seems to be that a return to a metallic standard would offer the only means to measure the volume of currency in circulation in relation to the volume of commodities to be exchanged. The implications in this statement will be discussed after we have briefly presented the opinions of the so-called anti-bullionists.

It is to be remembered that we are interested here not primarily in a recounting of old controversies but in the detection of the process of doctrine formation and its relation to the problems in economic reality with which these doctrines were concerned. It is therefore of little importance to follow every single one of the arguments in these controversies, especially if these arguments relate directly to the economic position which its advocates maintained. Most of the anti-bullionists were in one way or another connected with the government, and in many of the discussions the need for a defense for the measures taken by the government became visible. Thus, for instance, the proof offered by means of available statistics that the volume of the notes of the Bank of England had not increased, and that there was no necessary connection between the differing volumes of paper currency and the fluctuations of the exchange rates or the bullion quotations was easily refuted by Ricardo in saying that

> Whilst the high price of bullion and the low exchange rates continue, and whilst our gold is undebased, it would to me be no proof of our currency not being depreciated if there were only 5 millions of bank notes in circulation. When we speak, therefore, of an excess of bank notes, we mean that portion of the amount of the issues of the Bank which can now circulate, but could not, if the currency were of its bullion value. When we speak of an excess of country currency, we mean a portion of the amount of the country bank notes which cannot be absorbed in the circulation because they are exchangeable for, and are depreciated below, the value of bank notes.[18]

More important is the point which was raised recently by Professor Viner in discussing the bullionist position when he pointed out that "throughout the controversy . . . bank deposits (were) . . . either over-

[15] Ricardo, *op. cit.*, p. 280.
[16] *Ibid.*, p. 281.
[17] *Ibid.*, p. 279.
[18] Ricardo, "Reply to Mr. Bosanquet," *Works*, l.c., pp. 349-350.

looked or else held not to be currency."[19] This is of interest especially in view of the fact that Samuel Turner once defined a country bank as "a kind of clearing house, where, without any actual interchange of notes or money, the greater part of all payments between man and man was effectuated by mere transfers in the books of their bankers. . . . It was merely the smaller payments for wages and weekly bills which required notes."[20]

Another point raised by the anti-bullioinists was that in times of large-scale monetary remittances and heavy purchasing of corn because of increased needs of the army as well as because of bad harvests at home, the balance of exchange operations had to be disturbed, and that it was this tendency toward an unfavorable balance which forced for that time the rate of exchange below par.[21] Ricardo maintained at first that whatever the reasons for unfavorableness of the exchange rates, the exchange rates would adjust themselves automatically to the previous level.[22] He was supported in this contention by Wheatley who even more rigidly contended that

> When the equilibrium of money is . . . altered between any two nations, . . . it is natural for the person who trades in bullion, like the merchant who trades in any other commodity, to profit by this variation, export his merchandise where it will fall to most advantage . . . the instant the equilibrium is avowedly affected by the volume of exchange, it becomes his interest to transmit it from the country where it is cheaper to the country where it is dearest, in order to receive his profit.[23]

This apparently highly controversial point seems, however, to be of a rather verbal nature if we consider realistically the circumstances involved. If only occasional remittances had been made to foreign countries, there seems little doubt that Ricardo's prediction of a rather speedy adjustment would have been true. Fact was, however, that the remittances were continuous and left during a war little possibility for the predicted adjustments to operate. Many of Ricardo's fellow bullionists conceded this point, and it seems that Ricardo himself, when confronted with the direct question and not with a statement of general principles, actually approached this point of view to a considerable extent.[24] On the other side, the anti-bullionists readily acceded that the adjustment predicted by the bullionists would take place soon after the removal of the cause for the disturbances, that is, the

[19] Jacob Viner, *Studies in the Theory of International Trade,* New York, 1937, p. 130.

[20] Samuel Turner, *Considerations upon the Agriculture, Commerce and Manufactures of the British Empire,* 1822, pp. 54-55.

[21] Henry Boase, "A Letter to . . . Lord King in Defense of the Conduct of the Directors of the Bank of England and Ireland," 1804, pp. 22-23.

[22] David Ricardo, "Reply to Mr. Bosanquet," *Works,* p. 360.

[23] John Wheatley, *Remarks on Currency and Commerce,* 1803, p. 56.

[24] Ricardo, Appendix to "Reply to Mr. Bosanquet's Observations," p. 363, where he denies awareness "of any causes but excess . . . which could produce such effects as we have for a *considerable time* witnessed," admitting therewith and stating at another place (p. 364) that he is not disposed "to contend that the issues of one day, or of one month, can produce any effect on the foreign exchanges; it may possibly require a period of more permanent duration; an interval is absolutely necessary before such effects would follow."

cause for the lowering of the exchange rates, which in this case had been the forced expenditures abroad for the war.

Ricardo's never-endingly repeated solution to the existing difficulties was curtailment of the volume of currency. "Diminish the currency by calling in the excess of Bank notes . . . and what can prevent . . . an importation of gold and consequently a favourable exchange?"[25] The anti-bullionists, as far as they were representatives of the government, denied the advisability of such a policy *under the existing conditions of war.* The so-called anti-bullionists of the Bank of England type had, however, quite different reasons for being interested at least in the temporary maintenance of the existing volume of paper. It is true that the Bank of England had been established by London merchants. The successors of these London merchants were still largely engaged in overseas trade. The Bank itself, however, established with the purpose of making profits and gaining the privilege of continuing to make profits, but under the cloak of aid to the government, had become with time less wedded to the particular interests of its one-time founders and began to lean toward the new sources of profits which had for some time been developing in England. These sources involved the expansion of English productive enterprise. Long enough had the Bank of England refused to accommodate those country merchants who had turned producer, as well as the newly developed type of the industrial entrepreneur. Cold-shouldered by the Old Lady of Thread-Needle Street, they had begun to develop effectively their own institutions. Now, under the conditions of the commercial war, industry was not only expanding but was offered ample opportunities for speculative excesses. And in these golden opportunities the Bank of England wanted to partake. We thus see the directors of the Bank of England under the guise of theoretical advocacy of anti-bullionist doctrines busily engaged in defending the plenty of available money, which they were equally engaged in lending out.[26]

Admittedly, it is difficult to disentangle today the exact use to which those commercial credits were put, but from indirect evidence it can be assumed that they were *used for productive and speculative purposes within the country rather than as formerly in international trade.* There is even more likelihood lent to this suggestion if we consider that during the time of the commercial wars and after the loss of the American colonies, the overseas trade tended to revert to the west coast of England, thereby giving rise to new large banking establishments like Gurnell, Hoare and Harman, who financed the trade between Liverpool and Philadelphia by means of Quaker bills, and who linked their transactions with Hamburg. At the same

[25] *The Morning Chronicle,* Sept. 14, 1809.

[26] *Cf.* Report from the (Commons) Committee . . . on the Bank of England charter, 1832, appendix no. 59, p. 54. Also, Reports by the Lords Committee . . . (on) the expediency of the resumption of cash payments, 1819, appendix A, 5, p. 309.

time, Ireland and Scotland offered accommodations to the country banks of Manchester and Lancashire. In the bullion controversy we can thus observe the amiable phase of this beginning struggle between bullion and bills, that period in which the Bank of England still tried to participate. In contrast, we find later, in the forty years after 1826, that the Bank began to wage a war against the discounting houses and the joint stock banks which ended in "a highly involved triangular action in which the first all but eliminated the second, and so made the third subject to itself."[27]

III

In connection with the granting of "excessive" commercial loans by the Bank of England, attacks upon the prevailing notions of the function of interest were made. The current doctrine had been that "the whole paper money of every kind which can easily circulate in any country never can exceed the value of gold and silver, of which it supplies the place. Should the circulating paper at any time exceed that sum . . . it must immediately return upon the banks to be exchanged for gold and silver."[28] Obviously, the implication of this law was that abundance of money existed at the time of its operations only as far as the *demand* for money was concerned, but that this demand was not meeting an equally abundant *supply*. The operation of the usury laws in England at that period prevented, at least to a certain extent, this condition from resulting in a serious throttling of a healthy expansion in production or at least in an undue increase in the price for the capital necessary for this expansion.[29] No wonder then that Adam Smith did not find it necessary to develop a special theory of interest at a time in which interest actually did not as yet play any decisive, functional rôle. At the turn of the century, the intensity in the demand for money did not slacken, but the facilities to supply the demand had developed greatly. Thus the venerable directors of the Bank of England combined with the merchants when the latter began to observe with pain the discrepancy between the interest allowed under the usury laws and the amount of profit which they had been able to gain from trade for a considerable time. This was especially true in time of war when oversea trade profits were reduced by increasing risks. Thus very gradually but none the less determinedly there began an advocation of the repeal of the usury laws.

Mr. Thornton was one of the first to offer theoretical arguments in defense of this position. He maintained that

> In order to ascertain how far the desire of obtaining loans at the bank may be expected at any time to be carried, we must inquire into the subject of the quantum

[27] Walter Newbold, *Democracy, Debts, and Disarmament*, New York, 1933, p. 17.

[28] Adam Smith, *op. cit.*, bk. ii, ch. ii, p. 283.

[29] *Cf.* for previous consideration of this point: Sir Josiah Child, "Some brief observations concerning trade and interest of money," 1688, pp. 7-16; also Sir William Petty, *Quantulumcunque* . . . , 1682, p. 26; John Locke, "Some considerations of the lowering of interest and raising the value of money," pp. 6 and 16.

of profit likely to be derived from the borrowing of the existing circumstances. . . . We may . . . consider this question as turning principally upon a comparison of the rate of interest taken at the Bank with the current rate of mercantile profit.[30]

Viner dismisses rather easily the answer which the Bank of England officials gave to these and similar statements before the Bullion Committee when they were denying that

The security against over-issue by the Bank would be reduced if the discount rate were to be lowered from five to four or even to three per cent. No person, they insisted, would pay interest for a loan he did not need, whatever the rate, unless it were for the purpose of employing it in speculation, "and provided the conduct of the Bank is regulated as it now is, no accommodation would be given to a person of that description."[31]

It is hard to see how, under the conditions of a healthy industrial expansion and an adequate availability of money, the interest rate can possibly play any important regulatory rôle if the officials of the Bank spoke with sincerity. No other regulative check for the expansion of credit is necessary but the investigation into the productive and non-speculative character of the loan. If the rate of interest were higher, it could result only in an increase in the cost of production of the commodities, which latter would amount to a factual decrease in the rate of interest, or it might result in a decrease in the rate of industrial expansion. Ricardo seems to see clearer at this point when he writes: "If the mines had been ten times more productive, ten times more money would the same commerce employ,"[32] and publicly, he said once that "what the directors thought a check—namely, the rate of interest on money, was no check at all to the amount of issues, as Adam Smith, Mr. Hume and others had satisfactorily proved."[33] It does not seem that a reference to Ricardo's *Principles* is directly relevant here—namely, that

The applications to the Bank for money . . . depend on the comparison between the rate of profit . . . and the rate at which they are willing to lend it. If they charge less than the market rate of interest, there is no amount of money which they might not lend,—if they charge more than that rate, none but spendthrifts and prodigals would be found to borrow from them.[34]

It is true that Ricardo suggested that a discount rate below the rate of interest would enable otherwise submarginal establishments to continue production. However, as far as "the whole business which the whole community can carry on" is concerned,

It depends on the quantity of its capital; that is, of its raw material, machinery, food, vessels, etc., employed in production. After a well regulated paper money

[30] Thornton, *The Paper Credit*, l.c., p. 287.

[31] *Cf.*, Viner, *op. cit.*, p. 151, also *Report of the Bullion Committee*, 1810, *Minutes of Evidence*, p. 129.

[32] Ricardo, *Works*, p. 341.

[33] *Parliamentary Debates*, Hansard, 1st ser., xl, p. 744.

[34] Ricardo, "Principles of Political Economy and Taxation," *Works*, l.c., p. 220.

is established, these can neither be increased nor diminished by the operations of banking. If, then, the state were to issue the paper money of the country, although it should never discount a bill, or lend one shilling to the public, there would be no alteration in the amount of trade; . . . and it is probable too, that the same amount of money might be lent. . . .[35]

That a large number of modern economists accept the theory that the quantity of bank loans demanded is dependent on the rate of discount[36] will not be contested at present. But it is of interest to follow the development of this notion so widely accepted today, and to see those conditions gradually emerge under which theories of interest could only be formulated. Stating it this way means emphasizing the fact that there were conditions under which such a function of the rate of interest as asserted did not exist, and furthermore, that the first decennia of the eighteenth century represent that period in which the *new* conditions developed.

IV

The only way to shed some light upon the problem of responsibility for changes in prices will be found in an investigation into the concrete activities of the country banks, an attempt to circumscribe their sphere of influence and to determine the degree of interaction between the country banks and the Bank of England. It was primarily the developing industry which insisted upon the creation of adequate monetary facilities.[37] It seems only natural that in a period of quick and large-scale expansion many business ventures bordered closely upon what today would be called speculation. To give an example, the banking house of Messrs. Daintry and Ryle of Macclesfield, with its bank at Manchester, incurred heavy losses because of advances which they had made for a scheme to run steam carriages on ordinary turn-pikes "which, when first proposed, seemed to promise certain success."[38] Such an enterprise seems, from the point of view of *our* times, to have been rather insecure. If, however, we can accept the fact that any process of expansion will show such jerks, the problem, especially as far as country banking is concerned, will appear in a different light.

The anti-bullionists had claimed that where paper money was issued by the banks solely upon the discount of sound and genuine commercial paper, no excess issue could take place. On this line of reasoning,[39] they came to the conclusion that the increase in prices could not have been the result of over-issue.

The implication in this reasoning is that only "sound" commercial paper

[35] Ricardo, *Works*, p. 221.
[36] Viner, *op. cit.*, p. 151.
[37] Leo H. Grindon, *Manchester Banks and Bankers*, 1877, p. 40.
[38] Grindon, *op. cit.*, p. 115.
[39] *Cf.*, *e.g.*, Coutts Trawter, *The Principle of Currency and Exchange*, 1810; John Hill, *An Inquiry into the Causes of the Present High Price of Gold Bullion*, 1810; also Charles Bosanquet, *Practical Observations on the Reports of the Bullion Committee*, 1810.

was being discounted. But what constituted sound paper at that time? As we have indicated above, many of the business ventures appeared in that period of quick and jerky expansion as perfectly sound, although they did not necessarily turn out to be sound at all. This necessary limitation which we have to attach to the argument of the anti-bullionists has to be carried one step further by distinguishing clearly the two spheres to which the argument of the relation between the changing volume of money and reacting prices is related. As far as a considerable part of the commodities whose prices were relevant was concerned, they were consumed at or very near the places of their production. And furthermore, the relatively undeveloped system of transportation and communication necessarily made for a much larger independence of the different parts of the country, with the result that the tendencies toward the establishment of a general price level were faint and visible only after considerable time had gone by.

Lastly, we may point out in this connection that the silent inference about the comparability between *different countries* and the relations between different areas *within one country* had not yet proved to be a fact. If we point out the difficulties that such a generalization encounters, we want to remember that the dynamic forces working in these two different areas were of a different character. In the relation between two countries, that is, between England and any other country, the objective was at that time that of *exchange*, and the side interest of those who were engaged in this activity was that of financing international trade. Capital export did not yet take place to any appreciable amount. Only *after* the latter had become an inherent part of now international industrial production was the basis for an analogical treatment insured.[40]

The bullionists' position on the possible explanation of the increase in the price level underwent a change within the duration of the controversy. Boyd clearly stated that the country banks were unable to grant credits in excess of their local demands as they had not been legally restricted to making cash payments and their customers were free to demand payments in this form. Even if they created credit for speculative purposes, the overissue to their localities would automatically be contracted by demands for cash or Bank of England notes, for instance, by London; "no part of their issue can possibly remain in circulation beyond what the increase in prosperity and industry of the country where they circulate can fairly absorb or digest."[41] The inference takes cognizance quite correctly of the fact that a healthy expansion of industry cannot possibly create an inflation when this expansion is being financed by a necessarily increased amount of credit, and that is in this case, paper money circulation.

Thornton was perhaps the first one to fall prey to the functionally in-

[40] *Cf.*, K. H. Niebyl, "Historijske Izmjene u Funkciji Izvoza Kapitala," *Ekonomist*, Zagreb, July-August, 1939, vol. v, no. 7-8, pp. 284-292.

[41] Quoted by Silberling, *Monetary Policy*, l.c., p. 405.

admissible identification between money circulation in the provinces and the functioning of money in international exchange. There is no doubt that the financial structure of England was gradually developing toward centralization, but to state that the Bank of England was already the basis and the controlling influence of the country's entire credit circulation was far overstating the development as it had taken place up to this time.[42] Thornton's vision is admirable in seeing the outlines of the things in process and to come, but he exhibits here a fundamental shortcoming in the entire neglect of what actually was happening within the process of *production*. He preferred intellectual speculation about the possible relations between the multitude of monetary *surface* phenomena.

As far as the development of the monetary relations *in international trade* is concerned, the bullionists, and especially Thornton, contributed extensively to our knowledge of these processes. He postulated the principle of a monetary equilibrium in *commercially*, but not yet productively, interconnected areas. Here he explained conclusively on the basis of what may be called a purchasing-power parity theory that in the nations having a metallic standard the precious metals would always tend to be evenly distributed, as heavy disparity would tend to increase or decrease commodity prices. We want to remember here again that the prices to which Thornton refers are only those of commodities in international trade and that these are not necessarily relevant to the provinces.[43] Ricardo reasoned in much the same way.[44]

The conclusion we come to can be summarized in the following way. There was no doubt about the tendency for the prices in England to increase. This tendency was occasioned by two different and not directly connected causes. The increase of the prices in international trade was largely due to the extraordinary credits which the government had been forced to take out in order to finance the war and the equally extraordinary remittances to foreign countries in order to pay either directly for the expenses of the English armies or indirectly to subsidize those nations which were fighting the cause of the English commercial interests. The increase, and even more so, the fluctuations of the prices in the provinces of England have to be explained primarily with reference to the productive expansion whose very character was to proceed in jerks. This was occasioned by the *necessarily anticipatory character of investment* at that time which had to border on, and was in many cases identical with, speculation.[45]

Professor Viner has drawn attention to the fact that there exists an-

[42] Boyd's *Letter to Pitt*, 1801, p. 20.

[43] Thornton, *Paper Money*, l.c., pp. 115 *ff*.

[44] Ricardo, *The High Price of Bullion*, l.c., pp. 275 *ff*.

[45] *Cf*. also, Silberling, *The Monetary Policy of Great Britain*, p. 420, footnote 7, "It was found that the quarterly cyclical fluctuations in the country notes *preceded*, or *synchronized with*, those of wholesale commodity prices."

other version of the theory of inflation, and he quotes Thompson and Burgess. (T. P. Thompson, "On the Instrument of Exchange," *Westminster Review,* Vol. I, 1824, p. 200; Henry Burgess, "A Letter to the Right Honorable George Canning," 1826, pp. 79-82. *Cf.* Viner, *op. cit.,* p. 189.) According to them, the increased volume of money would result in increased employment in the production of consumers' goods, and thus a rise in prices would be rather slow in view of the increased supply. There seems to be no reason for these views to conflict. While they do not coincide, they do not contradict, but, rather, complement, each other.

V

From the foregoing presentation of the main elements of the classical theory of inflation, some conclusions pertinent to theory formation today can be drawn. As regards each one of the main concepts developed and subsequently employed, we found that they were relative to and inseparable from a particular set of circumstances. These circumstances were not "particular" in the sense of "accidental," but form a consistent, while at the same time qualitatively changing, pattern. Having been created for the solution of concrete problems immanent in this pattern, and reflecting this pattern in turn in their logic, the conclusion is forced upon us that these economic concepts, as by inference the concepts of other disciplines, must change correlatively.[46]

More particularly, we found that the significance of inflation-like phenomena depends on the concrete stage of the qualitatively changing process of production. In early industrial production the possible and actually occurring expansion justified the assumptions of (a) a quasi-equilibrium, and (b) a relatively high and still increasing degree of unfettered interdependence of the factors of production. A monetary theory, therefore, based on these assumptions necessarily had to coincide with a high degree of accuracy with the concrete economic events at that time. This, however, inferentially amounts to saying that the absence of the same conditions necessitates the formulation of correspondingly different concepts.[47]

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[46] *Cf.* my article, "The Need for a Concept of Value in Economic Theory," *Quart. Jour. of Econ.,* Feb., 1940.

[47] For a recent statement of a different point of view, see A. W. Marget, *The Theory of Prices,* Vol. I, New York, 1938.

INCIDENCE OF TAXATION AS AN ANALYTICAL CONCEPT

Recent discussion in this *Review* has questioned the logical completeness of the classical theory of tax incidence. The first purpose of this paper is to show that classical theory is not only logically complete, but that it is also adequate to the analysis of the most important effects of nineteenth century fiscal measures. Doubts on the point of logic are believed to arise from a misunderstanding of classical analysis. Yet this misunderstanding has not been without good effect if it promotes the realization that classical doctrine, although valid in itself and adequate to nineteenth century problems, is inadequate to deal significantly with modern problems. The dynamic character of economic activity today needs far greater emphasis than it customarily receives in literature on public finance. While "incidence" may be a useful analytical tool, alone it cannot answer important questions as to the effects of fiscal policy on incomes and employment. Moreover, the amount of confusion which still attends even purely theoretical study of tax "burden" suggests that "incidence" is an unnecessarily difficult concept. For these reasons Edwin Cannan long ago had the rare vision to urge economists to abandon incidence altogether as an analytical tool. Following in the steps of Cannan, a second purpose of this paper is to formulate a system of concepts which may be useful in dynamic analysis. The system described here does not embody any really new ideas, but rather adapts to the treatment of fiscal matters an analytical apparatus already extensively employed elsewhere in economic theory. This apparatus is "general" in the sense that it includes the idea of incidence.

1. *The Meaning of Incidence*

As used by Smith,[1] Ricardo, Mill, and their followers, the concept of incidence came to be invested with a special meaning which has found repeated explicit definition in Italian, German, and English literature. According to Seligman, the "process of the transfer of a tax is known as the *shifting* of the tax, while the settlement of the burden on the ultimate taxpayer is called the incidence of the tax";[2] and "through the process of shifting, the taxpayer escapes the burden of the tax."[3] Seligman then distinguishes between "incidence" and "pressure" of a tax, and shows that "the burden resting on the consumer" may be greater than the amount of the tax.[4] But incidence cannot exceed the amount of the tax, for "as Natoli well points out, . . . there can be no incidence without a corresponding revenue to the treasury."[5] In the first few pages of his work, von Mering accepts this definition of incidence, noting that the word is used in the same sense in standard literature in Italian and English.[6] In classical theory, therefore, "incidence" refers only to the amount of income absorbed by a given tax, and not to the total net change in income resulting from

[1] Adam Smith speaks of "tax-shifting," of "final payment," and of "burden," but does not use the expression "incidence." The same is true of Ricardo and Mill. As subsequently defined and used, the concept is nevertheless present in their work.

[2] E. R. A. Seligman, *The Shifting and Incidence of Taxation,* 4th ed., revised, 1921, p. 1. (Changes appearing in the 5th edition are not significant from our standpoint, references throughout being to the 4th edition.)

[3] *Ibid.,* p. 3.

[4] *Ibid.,* p. 11.

[5] *Ibid.,* p. 12.

[6] Otto Frhr. von Mering, *Die Steuerueberwaelzung.* His study is outstanding in German literature on the incidence of taxation.

taxation and expenditure. In the light of this definition, is traditional theory logically valid?

In a note appearing in this *Review* in 1930,[7] M. Slade Kendrick states that economists have always neglected the effects of public expenditure on demand and incidence, and his criticism appears to be accepted by Elmer D. Fagan[8] and Alfred G. Buehler.[9] Kendrick uses a gasoline tax and corresponding expenditure of revenue to show that public expenditure affects incidence: If the revenue is spent on roads, he shows quite rightly that such policy may increase demand for gasoline and therefore shift the tax entirely to consumers in the long run. In short, the demand curve for gasoline shifts to the right, "marginal" producers are enabled to remain in the industry, all sellers make at least as high profits as before the tax, and consumers pay the whole tax in the form of higher prices for gasoline. Had the demand curve not shifted, some producers, in accordance with Marshallian analysis[10] would have withdrawn from the industry, and profits of the remaining producers would be reduced. This is easily demonstrated by use of Marshallian technique.

It is, of course, proper to stress the effects of shifts in demand upon relative incomes and the allocation of resources. But such emphasis is a fundamental characteristic of classical analysis. In fact it is axiomatic that consideration of incidence *necessarily* involves consideration of effects of public expenditure and other variables upon both demand and supply functions, the demand function for various goods and services being simply the supply function of other goods and services. Moreover, the whole purport of the controversy revolving about poor-relief since Malthus and Ricardo is that such relief-expenditure would increase population, consequently the demand for "corn," the price of "corn," rent, and so on. In other words, such public expenditure was seen to be capable of altering the demand function for "corn," which is, in the long-run, classical sense, the supply function of "labor." In the light of this fact alone it is difficult to understand the opinion that, until Edgeworth mentioned the point, economists have always neglected the effects of public expenditure on demand and incidence.[11] Such a suggestion is contrary to an overwhelming weight

[7] "Public Expenditure; A Neglected Consideration in Tax Incidence Theory," *Am. Econ. Rev.*, June, 1930. See also "Incidence and Effects of Taxation" by the same author in *Am. Econ. Rev.*, Dec., 1937. The second article involves no theoretical modification of the first.

[8] "Tax Shifting and the Laws of Cost," *Quart. Jour. of Econ.*, Aug., 1933.

[9] "Public Expenditures and Taxes," *Am. Econ. Rev.*, Dec., 1938.

[10] Kendrick uses an upward sloping supply curve and a demand curve of elasticity less than infinity and greater than zero.

[11] Concurring in Kendrick's view that the effect of public expenditure on demand and incidence has been neglected, Fagan and Buehler strangely attribute to Edgeworth the first (Buehler says "among the first") recognition of the influence of public expenditure on demand and incidence. Edgeworth comments that "rates on houses when expended in

of evidence.[12] And from a purely *a priori* standpoint, it would seem extraordinary to believe economists to have supposed that public revenue somehow vanishes without affecting demand and prices.

Nevertheless, in taking such an uncomplimentary view of classical tax theory, Kendrick, Fagan, and Buehler place themselves in illustrious company. Antonio de Viti de Marco used a "road-construction" example very

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improving the neighborhood tend to increase the demand for houses. Yet in measuring the burden of the tax to the owner, it is allowable in pure theory to abstract its influence on demand." (F. Y. Edgeworth, "The Pure Theory of Taxation," *Econ. Jour.*, 1897; also in *Papers Relating to Political Economy*, vol. ii, p. 63. Edgeworth was of course fully aware of the influence of public expenditure on supply functions (demand functions) and incidence. But the same thing was true of many theorists before him.

[12] Adam Smith's discussions of the "Expense of Defence," of "Public Debts," and of the burden of taxation leave no doubt as to his awareness of the effects of public expenditure on price. (*Cf. The Nature and Causes of the Wealth of Nations*, Book v, ch. i, part i, ch. ii, iii.) And recognition of the effects of expenditure for poor-relief on demand and population is basic to Malthus' and Ricardo's well-known discussions on this point. Indeed, Malthus' theory of population (which is in effect the Ricardian theory of wages) and the classical theory of rent both recognize the effects of poor-relief on population, of population on demand for "corn," and effects of the price of corn upon rent. Cournot explicitly recognized the effects of taxation and expenditure upon "the law of demand," and his mathematical treatment of demand and supply functions allows implicitly for any changes induced by public expenditure. (*Researches into the Mathematical Principles of the Theory of Wealth* by Augustin Cournot, 1838. The English edition appeared in 1897, references being to pages 68, 71, and 47-53.) John Stuart Mill was also quite aware of the problem. (See, *e.g.*, p. 828. *Principles of Political Economy*, Ashley edition.) Wicksell says that the question of public expenditure "cannot be entirely without significance for the problem of tax incidence." (Knut Wicksell, *Finanztheoretische Untersuchungen*, pp. 6, 7.) See also C. F. Bastable, *Public Finance*, 3rd ed. rev., pp. 7, 90, 316, 335; Alfred Marshall, *Principles of Economics*, 8th ed., book v, especially pp. 418, *ff.*, and book vi; Sir Josiah Stamp, *The Fundamental Principles of Taxation*, 1921, p. 75 (this reference is cited by Buehler); A. de Viti de Marco, *Principles of Public Finance* (Eng. ed.), p. 148 (cited by Buehler); Luthringer, Chandler and Cline, *Money, Credit, and Finance*, 1938 (cited by Buehler), pp. 273-74.

It is interesting to note the number of articles which appeared on this subject during the three years prior to Kendrick's comments. F. P. Ramsey saw that transfers of income from taxpayers to rentiers and pensioners would "slightly alter the demand schedule in a way depending upon the incidence of the taxes and the manner of their expenditure." ("A Contribution to the Theory of Taxation," *Econ. Jour.*, March, 1927.) D. H. Robertson criticized the Colwyn Committee for "harping" on an "unfruitful distinction between the 'incidence' of a tax and its 'effects,' " instead of emphasizing the short-run effects of public finance upon demand and supply functions. (The Colwyn Committee did, however, consider these problems—"The Colwyn Committee, the Income Tax, and the Price Level," *Econ. Jour.*, Dec., 1927.) Hugh Dalton found it "curious" that Pigou refers "only casually . . . in a footnote" to the "highly important question of the net effect of raising and spending of a given revenue." (Review of A. C. Pigou, "A Study in Public Finance," *Economica*, June, 1928.) See also F. C. Benham, "Notes on the Pure Theory of Public Finance," *Economica*, Nov., 1934, reviewing Luigi Einaudi, "Contributo alla Ricerca della 'Ottima Imposta,' " *Annali di Economia*, July, 1929. The whole static problem is raised and carefully treated in M. Fasiani, "Materials for a Theory of the Duration of the Process of Tax Shifting," translated from the Italian by A. P. Lerner and Ursula K. Webb, *Rev. of Econ. Stud.*, Feb., 1934, and Feb., 1935. This article appeared in Italian in 1929 as "Elementi per una Teoria della Durata del Processo Traslativo dell' Imposta in una Societa Statica," *Giornale degli Economisti.*

similar to Kendrick's[13] to demonstrate the effects of public expenditure on incidence, and likewise asserted that "no attempt is made" in classical economic literature "to see what happens to the tax once it has left the budget of the taxpayer."[14] De Viti de Marco accused classical economists also of "a general disposition to suppose that the tax represents a loss of wealth for the taxpayer and for society."[15] Like Kendrick's attack, these charges appear to be based upon a misapprehension of classical doctrine. Just as it is legitimate to assume that demand for a given product will be affected by a given public expenditure, so it is legitimate to assume that demand for a given product will not be affected by a given public expenditure. This analytical technique—invoked frequently under the *ceteris paribus* formula—was used by classical economists just as it has been used by Edgeworth and others.[16] To mistake the technique for the full substance of classical economics is, however, to disregard extremely important aspects of that body of doctrine. Smith, Ricardo, Mill, and their successors devoted much of their attention, as the reader can see from perusal of their works cited above,[17] to study of the effects of public expenditure upon demand, price, and income. In addition to consideration of the effects of public expenditure upon factor supply-prices and the equilibrium distribution of private income, economists in the classical tradition have, contrary to de Viti de Marco's assertion, given much space (especially in discussions of the "benefit-principle") to augmentative effects of public expenditure upon taxpayers' "wealth."

Not only does analysis in the classical tradition appear to be logically complete; it also appears adequate to the objectives which economists of the past have set for themselves. In the first place, they have until recently been interested primarily in long-run *tendencies,* in long-run "equilibrium" rather than in short-run "dynamics." Moreover, this focus appears justified in the light of predominant eighteenth and nineteenth century forms of business organization and methods of production. Cyclical fluctuations have become of paramount importance only with the growth of geographical and industrial specialization and consequent interdependence of economic activities. Aside from its then relatively unimportant dislocationary aspects, public expenditure was also of a nature and magnitude which commanded attention mainly with respect to considerations of "burden"; and granted a *tendency* toward "full employment"—which classical theory assumed—the "burden of taxation" is from the long-run "static" viewpoint chiefly a question of incidence as defined in traditional theory.

One marvels indeed at the logical perfection of classical economics. The

[13] Kendrick does not mention the work of de Viti de Marco.

[14] *First Principles of Public Finance,* English ed., New York, 1936, p. 149.

[15] *Idem.*

[16] See footnote 11, above.

[17] See footnote 12, above.

most that can be said of theorists "in the classical tradition"—and this is no criticism—is that due to changes in data, their tools are simply unequal to the analysis of fiscal policy in the complex modern world.

2. *The Inadequacy of Incidence as a Theoretical Tool*

For some time economists have been dissatisfied with the analytical objectives countenanced by the "incidence" concept. Although recognizing incidence, however, as an unsatisfactory analytical apparatus, they have nevertheless regarded a dynamic "total-effects" approach as apparently too complicated for treatment in the "given state of the arts" of analysis. Bastable noted Cannan's objections to the term "incidence," but continued to accept the distinction between "incidence" and "effects" as "far too well established, and also far too convenient, to be thus summarily abandoned."[18] Yet he believed that the "aim of the statesman is not simply to distribute loss and reduce it to a minimum; it is rather to procure the maximum of the advantage to the community, and to so balance expenditure and revenue as to attain that result."[19] One concludes that he was not altogether satisfied with the concepts of incidence and burden as they had been inherited from the classicists and their Italian followers. Seligman appears to have sensed vaguely the limitations of the incidence concept; for he admits that to "discuss nothing but the 'effects' of taxation in general would be to render abortive the entire analysis" which he attempts.[20] Edwin Cannan urged theorists to abandon the incidence concept altogether, for he recognized that the "burden of a tax may . . . be felt by those who do not pay, as well as by those who do";[21] he found that the study of incidence "unduly restricts inquiries into the justice and expediency of taxes, since it is always held that the 'real incidence' of a tax is upon the persons who ultimately pay or provide the money for a tax.[22] He thought it "far better to consider the *effects* of taxation," saying, "I have no doubt that it is desirable to eschew the use of the term 'incidence' of taxation."[23] In the light of modern conditions, the correctness of Cannan's view appears almost self-evident. But Seligman considered it a "step backward to chaos," remarking with satisfaction that the "suggestion . . . has . . . met with no favor whatsoever."[24]

[18] *Op. cit.*, p. 361.

[19] *Ibid.*, p. 7.

[20] *Op. cit.*, p. 13. Although sensing that the real problem is the extent to which "the imposition of a tax affects changes in revenues and expenses of individuals," he holds nevertheless rigidly to the "conclusion that the problem *par excellence* is that of shifting and incidence" (pp. 13, 219). His analysis may be valid in the sense described above in the text, but the implication of contemporary conditions is clearly that the analysis should be scrapped, rather than the "abortive" problem of total effects.

[21] *Memoranda Chiefly relating to the Classification and Incidence of Imperial and Local Taxation* of the Royal Commission on Taxation, 1889, p. 166.

[22] *Idem.*

[23] *Idem.*

[24] *Op. cit.*, p. 13.

In 1924 the British "Committee on National Debt and Taxation," commonly referred to as the "Colwyn Committee," began an inquiry which culminated in an able analysis of the total effects of fiscal policy.[25] The *Report* of the Committee, published in 1927, devotes to be sure only nine pages to the economic effects of public expenditure, as compared with 125 pages devoted to "incidence and effects of taxation." But the Committee was aware that "any complete enquiry into the central finances of the country would involve a close examination of the whole of the expenditure side, as well as the revenue side, of the Government accounts."[26] In fact,

> . . . it would be impossible to form any just estimate of the effects of existing taxes, without giving some attention to other objects of Government expenditure; for, as Mr. J. A. Hobson expressed it, "the general long-range effects of taxation upon trade largely hinge upon the uses made by the State of the tax revenue."[27]

In other directions the *Report* marks a distinct advance in the study of fiscal policy. While following the terminology of economists, the Committee remarked that " 'incidence' is only concerned with the question on whom the more immediate burden of the tax rests," and that there may be "offsets" against benefit or loss.[28] In brief, the Committee recognized the very important fact that "the enquirer who has established the incidence of a tax has only taken a preliminary step towards appraising its effects."[29] The Colwyn *Report* was published more than ten years ago. It was based upon voluminous evidence taken from able men in both industrial and academic fields. Yet despite its common-sense basis and great suggestiveness, it seems to have had little influence upon subsequent studies of public finance.

The fact can stand repetition, however, that in evaluating past studies one must bear in mind past conditions. Economic effects of taxation and expenditure seem to have been neglected only in their dynamic aspects. Throughout the nineteenth century, the principal items of public expenditure were "war," "interest on the public debt" (which resulted from war), and "civil government";[30] and until a very few years ago, these remained the chief rubrics of public expense. In 1782, during the war in America, the British government spent £29,230,000, of which over 68 per cent went

[25] For other opinions of the work of the Committee, see J. M. Keynes, "The Colwyn Report on National Debt and Taxation," *Econ. Jour.*, June, 1927; and D. H. Robertson, *op. cit.* As noted above (in a footnote), Robertson regretted that instead of considering the whole problem, "the Committee preferred to harp on an unfruitful distinction between the 'incidence' of a tax and its 'effects.' " Actually, the Committee paid much less attention to incidence than is accorded the term by most economists—as Robertson points out.

[26] *Report*, p. 97.

[27] *Idem.* Mr. Hobson's evidence seems to have been the inspiration for some of the most advanced work of the Committee.

[28] *Report*, p. 107.

[29] *Idem.*

[30] Elizabeth Boody Schumpeter, "English Prices and Public Finance, 1660-1822," *Rev. of Econ. Stat.*, Feb., 1938.

for war, over 25 per cent for interest and management of the public debt, and less than 6 per cent for civil government.[31] In 1816, three years after the heaviest expenditure incurred for the Napoleonic Wars, the total outlay fell to £63,030,000, of which 40 per cent went for war, 45 per cent for interest and debt charges, and about 15 per cent for civil government.[32] In 1928-29 the British government spent a total of £819,800,000, of which 14 per cent went for national defence, 38 per cent for interest and management of the public debt, about 18 per cent for civil government, 13.8 per cent for national pensions and insurance, and about 16 per cent for miscellaneous items. Civil government included contribution to local revenues, expense for education, colonial and foreign services, agriculture, roads, health, housing, police, and (about .2 per cent of the total) unemployment benefits.[33] In discussing the incidence of taxation and the economic effects of expenditure on war and servicing the debt, economists from Adam Smith to Pigou have therefore considered the main long-run problems of the past.

But the last few years have seen an extension of government activity to dimensions which would no doubt have appeared monstrous and inconceivable to Adam Smith. In various countries public enterprise today includes railroads, power production, mining, tobacco monopoly, house construction, road building, direct lending to business, recreational activity, irrigation projects, and many other ventures. In addition, public expenditure embraces such objectives as unemployment insurance, old-age pensions, control of agricultural production, direct relief, "work" relief, slum clearance, tenement subsidies, flood control, and other items in part allied to "public enterprise." In 1937, for example, United States federal expenditure alone amounted to over $8,500,000,000, of which only 11.5 per cent went for national defense, 10.8 per cent for interest on the national debt, and 9.9 per cent for civil government; 30.8 per cent went for relief of unemployment, 14.1 per cent for veterans' pensions, 13.5 per cent for public works, and 9.4 per cent for agricultural adjustment, social security, and sundry other items.[34] These figures should be compared with British and American expenditures in 1928. In that year the United States federal government spent a total of $3,647,256,000, of which 19.5 per cent went for national defense, 20 per cent for interest on the national debt, 14.8 per cent for debt retirement, 36.56 per cent for civil government (*i.e.*, Departments of Justice, State, etc., Post Office, Retirement Pensions, etc.), and only 9.0

[31] *Idem.* Expenditure on poor-relief, etc., is apparently included in the amount spent for civil government.

[32] *Idem.*

[33] Mallet and George, *British Budgets, 1921-1933.* Per capita expenditure comparisons of years as far apart as 1792 and 1928 are of doubtful value owing to the difficulty of correcting for price changes, national income changes, and social organization. For this reason such comparisons are omitted.

[34] National Industrial Conference Board, *Cost of Government in the United States, 1935-1937.*

per cent for other items, including social services.[35] These figures, it should be emphasized, are only for *federal* expenditure. State and local expenditure in the United States increased from $7,724,000,000 in 1927 to $8,471,000,000 in 1936.[36] This expenditure is devoted mainly to highways, education, and welfare.

In short, public authority in the United States spent in 1937 about $140 per capita, an amount roughly equivalent to 20 per cent or 25 per cent of the national income.[37] One may think that the 100 per cent increase in total public expenditure, federal, state, and local, since 1923-25, is a temporary phenomenon which will disappear when the "depression" disappears. But the history of public finance shows that high levels of public expenditure reached in times of crisis seldom recede by very much; and it is most significant that the *Report of the Senate Committee on Unemployment and Relief* proposes putting relief on a permanent basis and contemplates "a long-range program of public works as the largest direct federal activity in making jobs for those unable to find work in private employment."[38] Moreover, it has been positively urged by a group of economists that the federal government undertake a permanent program, based upon a steady increase in the national debt, for financing consumption, investment, control of "monopoly," control of agriculture, long-range public works and various other measures aimed at "social security."[39] It seems certain that through its taxing and spending policies government will direct the allocation of an ever increasing proportion of our country's resources; in fact, there are many who believe that such a course is necessary for preservation of the institution of private property.

If this is true, public finance attains an organic and generative significance —especially with respect to dynamic change—which it has never had before, and its study from an integral, dynamic standpoint becomes imperative. For this task the traditional theory of tax incidence is inadequate.

3. *Suggested Definitions and a Change in Viewpoint*

As a pressing practical matter, we want to know how fiscal policy may *immediately* affect employment, the aggregate national income and its distribution, and the amount of money income left to individuals to be disposed of in accordance with individual choice as to real income. The

[35] National Industrial Conference Board, *Federal Finances, 1923-1932.*

[36] National Industrial Conference Board, *Cost of Government in the United States, 1935-1937.*

[37] It is not intended to say that the government regulated the distribution of 20 per cent to 25 per cent of the national income. Public expenditure resulted in part in an *increased* national real income. Only if public expenditure were completely unproductive transfer expenditure could one say that public authority controlled the distribution (directly) of (*e.g.*) 20 per cent of the national income.

[38] *New York Times,* January 16, 1939.

[39] Gilbert, *et. al., An Economic Program for American Democracy,* 1938.

real income of the individual arises in part from government choices as to expenditure, and in part from the individual's choices as to expenditure; what are the proportions, and what is the net total result? With reference to recent growth in public expenditure, it should perhaps be remarked that the answer to this question depends in part upon the amount of existing unemployed resources. Where resources are unemployed, as has been the case since 1929 at least, government expenditure may raise both aggregate real income and the individual's "disposable" income. But given "full employment," every increase in the "normal" level of government expenditure means a necessary contraction in the choice of some individuals as to how and in what form they shall enjoy their incomes. In short, the government may choose real income for some individuals as well as reduce the real income of the same or other individuals.

Thus, in analysis it is convenient to use concepts which can distinguish between money income left at the disposal of the individual, money income placed, through government finance, at the disposal of other individuals, real income chosen for the public by the government, and so on. One may describe these various ideas by such phrases as disposable private income, disposable public income, publicly selected income, etc. But unless carefully defined and related to other economic quantities, these phrases may be ambiguous. In order to describe the needed concepts precisely and unambiguously, it is convenient to identify them with a general symbolic terminology already made familiar by much discussion of J. M. Keynes's *General Theory of Employment, Interest, and Money*. Once conceptual meanings are clear, it is of course immaterial whether analysis is cast in terms of words or symbols.[40]

Let Y be defined as the total money income received by an individual or group directly and indirectly from all sources. Let Y_p represent money income left, net of taxes, at the disposal of those receiving that income from private enterprise, and Y_g the money income left, net of taxes, at the disposal of those receiving that income directly from the government. Y_x is defined as money income received indirectly from the government; *i.e.*, Y_x represents the money spent by government on real income selected

[40] It has been suggested to the author that, in fiscal problems, "the limiting factor is not inadequate symbols but inadequate data or analysis," and that "the mathematically-minded seem sometimes to feel that they have contributed greatly toward the solution of a problem when they have suggested a few symbols to represent a few ideas." It is easy to agree that tools of analysis are not ends in themselves, and that a thoroughly adequate apparatus contributes little to economics unless it is applied empirically. The view is also well taken that plethora of symbols and scarcity of analysis have contributed to confusion in certain fields (*e.g.*, the "savings-investment" controversy), where some of the "mathematically-minded" may have overrated their contributions. But in public finance the case may be otherwise. Here some difficulty besets the path of factual investigation because inadequate analytical tools are still used for this purpose. Lack of analytical concepts goes hand in hand with lack of recognition of the actual problems involved. In this sense the study of fiscal policy lags far behind developments in general economic theory.

by the government for the enjoyment of any given group, as, for instance, schools, roads, etc. These concepts, along with R (tax revenue), C (consumption), I (investment), and S (savings), have the following analytical limits. When referred to the whole society:

(1) $Y = (Y_p + Y_g) = (S + C) \geqq O$; the total flow of money income must be positive in any given period, for even net disinvestment has as its counterpart the receipt of an equal flow of money income by somebody; *i.e.*, even if S is negative, consumption cannot be less than disinvestment, in which case Y cannot be less than O.

(2) $Y_p = (S_p + C_p) \gtreqless O$; total private income net of taxes may possibly be less than zero, because private disinvestment may exceed private consumption, the difference being paid to the government in the form of taxes. This may have been the case in Russia.

(3) $Y_g \equiv (S_g + C_g) \doteq R = Y_x \geqq O$, by definition. Total tax revenue paid out to public employees to create government services cannot be negative. Dissaving of one group of government employees in excess of their consumption must be offset exactly by income which others receive from the government.

(4) $I \equiv S \gtreqless O$; discussion of Mr. Keynes's definitions of savings and investment has resulted in general agreement that the amount invested or disinvested in any given period is an identity with the amount saved or dissaved in the same period. On balance, a community may of course dissave or disinvest.

When referred to an individual or to a group smaller than the whole community:

(1) $Y = (Y_p + Y_g + Y_x - R) = (S + C) \gtreqless O$; an individual's income may be negative, for the excess of an individual's disinvestment over his consumption may be paid to the government in the form of taxes. Similarly,

(2) $Y_p = (S_p + C_p) \gtreqless O$, and

(3) $Y_g = (S_g + C_g) \gtreqless O$.

(4) $Y_x \geqq O$, by definition.[41]

[41] Rather than use a $(\pm Y_x)$ to indicate a balance of indirect, government-produced income over taxes paid, or *vice versa*, it seems preferable to adopt a terminology which permits one to measure indirect money income from the government (Y_x) against taxes paid to the government (R).

(5) $R \gtreqless O$, by definition.[41]

(6) $S \gtreqless I \gtreqless O$; the savings of an individual may of course differ from his investment even in the same period; similiarly he may save and invest or disinvest and/or dissave.[42]

Changes in the various quantities may be represented by increment-notation. We should then have the quantities $\pm\triangle Y$, $\pm\triangle Y_p$, etc. These quantities may all be referred to definite time periods, and thus converted into income flows, etc.

4. *The Gasoline Tax for Road Construction as an Example*

The usefulness of our concepts in analysis of fiscal problems may be demonstrated by applying them to the hypothetical case discussed by Kendrick, *i.e.*, to the levy of a gasoline tax used to finance road construction.

Levy of the tax will reduce disposable incomes for some group of people. Sellers of gasoline might absorb the tax entirely and immediately, without discharging employees. In this case, the decrease in disposable private incomes ($-\triangle Y_p$) of sellers (assuming their total income comes from private sources) would be equal to the increment in revenue ($+\triangle R$) received by government. Incidence of the tax, in the classical sense, would rest entirely on sellers of gasoline. Decreased money income for gasoline-sellers as a group would decrease their demand for other products, unless they chose to dissave. To the extent that their expenditure (C_p) was reduced, disposable private incomes (Y_p) of other groups would fall. For some wage-earners, disposable private incomes would fall to zero—the leftward shift in demand curves, incident to the decline in gasoline-sellers' incomes, would lead to discharge of wage-earners. Unemployed workers would then have the alternatives of dissaving, or of receiving disposable public income (Y_g) in the form of unemployment insurance, or relief, or employment on public works such as the new roads, or of private employment at probably lower wages (Y_p) than received before. Unless all workers thrown out of employment by the tax were extremely mobile as between their former

[42] In studying (*e.g.*) questions of relative efficiency of government as against private enterprise, it would be useful to parallel the above system of symbols with small letters to indicate real income, etc. Where $Y_x = Y_p = C_p$, and where Y_x is also "consumed," nevertheless

$$y_x \gtreqless y_p,$$

small y representing real income. Monetary concepts suffice however for the dynamic problems posed in this paper.

occupations and road construction, their search for work would exert downward pressure on the wages (mainly Y_p) of others in competitive occupations. Too frequently the fact is ignored that public expenditure also, in competing for raw materials and other resources, may raise costs in private enterprise and thus lead to unemployment and loss of disposable private income.

The dynamic possibilities reposing in such reductions of income and employment need great emphasis. Note that they are not dependent upon any assumption as to relative elasticities of supply and demand. The effects would be the same in generative significance even if half or all of the tax were shifted, in the sense of incidence, to consumers of gasoline. In the latter case different groups might be affected by leftward shifts in demand curves and resulting unemployment. But in either eventuality, the fact of *change* in taxation and public expenditure may be in itself enough to initiate a deflationary movement in prices and employment. If a new tax is levied when prices are declining or when business confidence is low, such a result is very likely. Owing to spatial and technical immobility of productive factors, the initial drop in incomes and employment, caused by levy of any new tax (or by any increase in tax rate), is in practice inevitably greater than the increase in incomes and employment resulting from expenditure of the revenue raised by the tax—except in the very unlikely case where the fiscal operation leaves consumers' expenditure patterns unaffected.[43] Even if expenditure of revenue occurs *pari passu* with collection of the tax, frictions are such that disposable incomes (mainly Y_p) must (in the general case) decrease by more than the amount of the income transferred to public employees; *i.e.*, for the whole community,

$$-\triangle Y_p > +\triangle Y_g.$$

Even in times of stable prices, a large change in taxation and public expenditure may thus generate a cumulative fall in incomes and employment for the whole community. The implication is that public expenditure should be shifted from one objective to another or tax-financed only when mechanical or psychological forces exist, or can be created, to offset the deflationary influence of such fiscal measures.

Turning now to publicly selected income (Y_x), roads yield no enjoyment until construction is finished. In the short run, expenditure on roads ($+\triangle R$) may be considered a public investment ($+\triangle I_x$), and it is therefore a sort of forced saving. Once the roads are opened to the public, this investment begins to be converted into publicly selected real income enjoyed by all those who use them. The roads may of course have been financed

[43] The same thing is true of *shifts* in competitive public expenditure of revenue raised by an unaltered tax.

by forced savings of a group much larger than (or differing altogether from) the one which benefits directly from them.[44]

In conclusion it seems that dynamic fiscal problems have been obscured by the practice of setting up neat geometrical curves whose elasticities indicate the "incidence of taxation." Without wishing to detract in the least from the real importance of incidence—now as well as before the depression of 1933—it is suggested that empirical study of the *total* effects of fiscal policy on incomes and employment would today be very much more fruitful than geometrical speculation as to the burden of a particular tax.

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[44] Assuming—as is generally the case—that the gasoline tax continues to be levied even after the initially contemplated objectives (the roads) have been achieved, there arises an interesting question as to the incidence of the tax. Kendrick says that consumers pay the whole tax if demand shifts enough to the right to allow marginal producers to remain in the industry. (See footnote 7, above.) If one sticks to the classical definition of incidence, this proposition is not generally true, but holds only in the special case where the tax ceases to be levied after the roads have been completed. If the tax continues to be levied, producers and consumers of gasoline will, if the supply-curve is upward-sloping, continue to share the incidence of the tax, the relative burden depending upon the relative elasticities of demand and supply. One can easily demonstrate this by drawing two parallel supply curves and two parallel demand curves, the vertical distance between the supply curves representing the amount of the tax. If the tax were removed, profits or rents of producers would increase although consumers would pay lower prices for gasoline. The continued levy of the tax therefore reduces the incomes of both producers and consumers of gasoline.

Note that analysis in terms of "elasticity of demand and supply," and therefore the investigation of incidence, is *possible* without reference to positions of demand and supply curves. It may be this fact which led Kendrick to assume that classical economists ignored the effects of public expenditure on incidence.

COMMERCIAL POLICY AS REFLECTED IN TREATIES FROM 1931 TO 1939

Great changes have largely transformed world trade during the years from the onslaught of the world depression to the outbreak of the present war in Europe. Nowhere are these changes so clearly reflected as in the treaties of commerce which have been negotiated during the past eight years. Since these treaties are the legal embodiment of one aspect of economic foreign policy, they represent a complex structure of contractual obligations wherein various national interests in the sphere of economic life find expression. For an accurate analysis of recent commercial policy, an examination of the tendencies, established practices, and methods exhibited in the binding agreements entered into by nations is essential. Here the use of the most-favored-nation clause, quotas, exchange controls, barter agreements, tariffs, bilateralism, and other devices of trade policy, the frequency of their appearance, and their content and scope, can be studied with a view to determining more precisely the nature of the above-mentioned changes.

I

The subsequent data are based upon a study of over 510 bilateral conventions, treaties, and exchanges of notes between states for the period 1931-1939.[1] This group is broken down by means of the accompanying table into various cross-classifications, by topics and kinds of provisions, and certain conclusions will be drawn from the number of treaties in each category. Provisions which are characteristic of the new trend in commercial policy will be examined in detail, and further general conclusions as to the effect of the new regime upon international trade relations will be indicated.

Even though this group is not exhaustive, it represents approximately twice as many negotiations of a similar nature as are recorded for the whole era from 1919 to 1930. One effect of the unsettled economic relations of the last decade has been to necessitate many and frequent agreements on trade and commerce. Of the 510 agreements, 137 were modifications of existing treaties. These modifications were not only changes within the broad pattern of agreements already in force; they also entailed alterations of a more fundamental nature.

As can be seen from Table I, when the total is broken down into component figures representing the several types of provisions found in this group of treaties, as well as the geographic distribution of agreements containing these provisions, some noteworthy facts emerge. But a *caveat* should be entered at once against interpreting the table too literally. Aside from the qualifications set forth in the explanation which accompanies the table, and which must be considered in any interpretations drawn therefrom, the data summarized should be interpreted as providing evidence on the character and content of recent commercial-treaty policies. To be most useful, the calculations presented here should be set over against treaty practice

[1] This figure constitutes probably one-half of all such negotiations during these years (until Sept., 1939). The particular accords cited are the most important and hence they are believed to be satisfactorily representative.

TABLE I

CLASSIFICATION OF PROVISIONS OF 510 COMMERCIAL TREATIES—1931–1939[1]

Provisions	U.S.A.	Great Britain	Germany	France	Italy	Central Europe and Balkans	Central and South America	All others	Total of each type	Per cent of total treaties
I Most-favored-nation clauses applying to:										
1. Tariffs only	11	6	14	13	8	36	59	129	138	27
2. Quotas, exchange controls, only, etc.	0	4	2	5	0	2	3	18	17	3
3. Both tariff and other controls	13	12	0	2	1	16	23	57	62	12
4. Details missing	0	0	0	1	1	3	4	11	10	2
TOTAL	24	22	16	21	10	57	89	215	227	44
II Exchange control:										
1. Use of proceeds of reciprocal trade	0	7	4	0	1	7	7	18	22	4
2. Allocation of exchange for imports	7	1	1	0	0	3	11	13	18	3.5
3. Stabilization of exchange rates	0	1	0	3	0	3	2	7	8	1.5
4. Others	13	6	4	2	2	2	7	26	31	6
TOTAL	20	15	9	5	3	15	27	64	79	15
III Quota provisions:										
1. General provisions only	18	9	5	11	4	13	11	51	61	12
2. Specific provisions only	0	2	5	8	4	6	4	61	45	9
3. Both general and specific	2	16	0	12	5	9	5	43	46	9
4. Other	0	4	2	1	1	2	2	14	13	2
5. Details missing	0	1	7	3	1	13	2	13	20	4
TOTAL	20	32	19	35	15	43	24	182	185	36
IV Tariff rates and provisions	18	19	30	28	8	70	27	136	168	33
V Intergovernmental coöperation in trade relations	0	4	10	0	1	13	2	24	27	5
VI Provisions to balance trade bilaterally	1	14	8	3	5	20	10	57	59	12
VII Clearing and payment accords	0	13	18	4	12	42	3	96	94	18

[1] A. To determine *the total number of agreements* containing a certain provision, *the total number of instances* is divided by two. The figures in the column headed "total of each type" are not the actual arithmetical sum of the figures

in the immediate post-war period, or, better still, the period 1870-1914. Taken by themselves, the findings tabulated in the table lose much of their significance. For example, the figures show that only 12 per cent of the agreements contained clauses leading to the bilateralization of trade, but this becomes more important than the small percentage would indicate when it is compared with previous treaties which rarely, if ever, embraced such provisions. The table should also be looked at as a whole. An attempt to prove certain tempting conclusions by consulting the data under separate headings should be made with caution because by the nature of the subject nearly all the figures are interrelated. Only within these limits has the summary any proper meaning.

The following facts seem clear. Clauses relating to most-favored-nation treatment were included in 227 agreements or two in every five; actual tariff rates or provisions concerned specifically with tariffs appeared in 168; 94 were clearing or payment accords; quota provisions, either definite or general, were incorporated in 185 of the group; clauses relating to foreign exchange control or the relation of various national currencies were found in 79; treaties providing agencies for the supervision of trade between the contracting parties numbered 27; and clauses leading directly or indirectly to bilateral trade balancing occurred in 59. Despite the qualifications mentioned above, some valid conclusions can be drawn from these facts.

First, the most-favored-nation clause, hitherto a common and accepted

in the horizontal line corresponding to each category of provisions. Rather, the totals in each case are one-half of the actual sum. Thus in interpreting the data, the figures which appear in the squares under the heading of various regions and countries mean one thing, and the totals mean another. For example: the figure "43" opposite the "Total of Quota Provisions" and under "Central Europe and the Balkans" indicates the number of *instances* in which a nation such as Roumania or Hungary was a party to an agreement containing a quota provision of some type. Similarly, the figure "89" opposite the "Total of Most-Favored-Nation Clauses" and under "Central and South America" indicates the number of *instances* in which a nation such as Brazil or Ecuador was a party to a treaty embodying some form of the most-favored-nation clause. In neither of these cases could the figure cited ("43" or "89") be taken to indicate the *number of treaties* because when two Balkan nations have signed an agreement containing quotas, it is recorded *twice*—once for each nation. Also, if Great Britain and Argentina signed an accord specifying quotas, it is recorded once under Great Britain and once under Central and South America. Hence each type of provision is recorded twice.

B. For obvious reasons, the various categories are mutually exclusive only within themselves and not *vis-à-vis* other categories. One most-favored-nation clause, for example, if it laid down the conditions for administering quotas and exchange controls, would be recorded under the first, second, third and fourth groups of provisions. Furthermore, one commercial treaty may contain tariff rates, quotas, clearing arrangements, most-favored-nation provisions, and bilateral trade balancing stipulations. Also certain provisions found in what are technically known as clearing or payments agreements are placed under the heading of exchange control provisions.

C. The various classifications of provisions have been interpreted very broadly, for the sake of analysis. Almost any provision which could reasonably be connected with exchange control, for instance, was placed in that group.

D. It is important to remember that the same country may appear over and over again in the same category, and that the same treaty, as noted above, may figure in several categories. For example, in the figure "35" opposite the "Total of Quota Provisions" under "France," agreements with Sweden alone, or with some other single country may make up five or six of the total. Brazil's agreements containing most-favored-nation clauses may amount to 15 of the total "82" under the Central and South American heading, and these may not be with separate nations.

E. The emphasis of the table is on *frequency* more than on exact relationships and quantity. Comparison between the totals in any category under given countries is not legitimate because the table does not indicate the total number of treaties to which each country was a party. Comparisons can be made only in general terms. Finally, treaties not examined in this compilation might change the results of individual comparisons.

feature of commercial treaties, especially before the World War, appears in only 42 per cent of the agreements.[2] The importance of this lies not so much in the fact that *fewer* most-favored-nation agreements have been negotiated, but in the fact that *more* agreements in the nature of strictly bilateral bargains, and in which equality of treatment was impracticable, have been concluded. Second, tariffs, certainly the *raison d'être* for pre-1929 trade treaties, form a part of only one-third of this group of treaties. It would be misleading, however, to assume that all other agreements were concerned with bilateralism, exchange problems, and quotas; many were merely most-favored-nation accords forming the category just mentioned. At the same time, the 168 treaties concerned with tariffs also include some agreements which contained quota and exchange provisions, and in these, tariffs were relegated to a rather minor rôle. It seems reasonable to conclude that tariffs are no longer the most important barrier to international trade. Third, quotas were, according to the table, a slightly more frequent subject of negotiation or treatment in agreements than were tariffs. This is a phenomenon peculiar only to the period under consideration. Prior to 1931 quotas were hardly a prominent restriction on the movement of goods between nations. Now quotas have become almost universal, and have therefore taken their place with tariffs as a field for international agreement. It should be noted that almost one-half of the quota provisions enumerated were general in scope, that is, they laid down no specific quota terms. Nevertheless this in no way minimizes the importance of the total figure; on the contrary, it proves that quotas have become sufficiently entrenched as an instrument of commercial policy to move nations to prescribe conditions for their application whether they exist or not.

Fourth, the regulation of foreign exchange transactions, with its influence upon the flow of trade, has also created treaty clauses designed to prescribe the terms of its operation. At least 79 agreements or 15 per cent of the total deal with it in some manner, apart from those agreements arising out of special difficulties of payment transfers, *i.e.*, clearing agreements. The table shows that clauses pertaining to exchange control have become an integral part of many commercial treaties concluded by nations which do not necessarily employ this type of control, and which do not experience difficulty in discharging their financial obligations—namely, the United States,[3] Great Britain and France.

Fifth, the group of treaties establishing intergovernmental coöperation in the control of bilateral trade and the administration of agreements, while not large in the aggregate, testify to the complexity of international eco-

[2] Even where it does occur it is of unlimited scope only in a minority of cases, by virtue of direct limitations and the presence of other provisions which largely nullify its effects.

[3] Nearly all the reciprocal trade agreements contain similar exchange control provisions.

nomic relations caused by the use of new methods of trade control and the supervision of trade by the state. Finally, the 59 treaties incorporating bilateral trade balancing measures are extremely significant.[4] Not all of these agreements bilateralize *all* of the trade between the contracting parties. Such agreements may apply only to certain goods or a certain percentage of the trade involved. But the fact remains that after nearly a century of world trade on a multilateral basis, a new system has developed. It is a system in which the exchange of goods between pairs of nations taken in isolation is considered to be the vital element, and in which the position of each nation in the world economy is ignored.

The geographic distribution of treaties containing certain types of provisions contributes more by way of verification than new information. Thus the tendency of most European nations to employ the most-favored-nation clause with less frequency than other nations since the economic collapse of 1930-31 is borne out by the table. France, Great Britain, Germany, Italy, and the Central European and Balkan states account for only one-quarter of the total number of *instances* in which any country was a party to an agreement containing some form of most-favored-nation treatment, although these countries participated in a proportionately greater share of the total number of agreements examined. And the United States, though represented by a smaller number of treaties than Great Britain, France, Germany and Italy, none the less was a party to more most-favored-nation agreements than any one of them, which fact substantiates the position of the United States as the foremost exponent of equality of treatment today. Perhaps even more significant is the indication that Germany, France, Italy, and the Balkan group have been less prone to apply the clause to quotas and exchange controls. This is undoubtedly the result of the pursuance by these nations of commercial policies which have necessitated the abrogation or violation of previous most-favored-nation obligations.

That quotas have been the keynote of French economic policy since 1931 is clearly shown. France was a party to more quota treaties than any other country, and it is instructive to note that many of these were with Central European and Balkan nations, a fact which partially explains the corresponding figure (total quota provisions) for that group. Great Britain, as a result of a new treaty policy inaugurated in 1934, also has a relatively higher quota figure. It is, however, the number of treaties containing *specific* quota provisions which is illuminating here. From the *total* number of quota provisions listed under each country it might seem as though the United States and Germany also negotiated quotas by treaty on the same scale with Great Britain and France; but, when the specific provisions are considered, it is apparent that the former two countries have

[4] Included in this calculation are those expressly of this nature; others, notably clearing and compensation agreements, ultimately lead to the same end.

not concluded actual quota agreements with the same frequency as the latter. Most of the quota provisions in the American treaties are general in scope, laying down the principles which must govern the administration of quotas if and when applied by either party.[5] It should be pointed out that the Balkan and Central European nations have engaged in specific quota agreements with much greater frequency than similar groups of smaller nations. The instances of countries in Central and South America engaging in specific quota transactions is notably small.

The appearance in treaties of exchange control provisions and bilateral trade-balancing clauses is fundamentally due to currency difficulties and their effect upon international trade. Again the table presents a fairly accurate picture of the way in which economic conditions in large measure dictate commercial treaty policy. Germany, the Balkans and their Central European neighbors, and the nations of South and Central America account for one-third of the total *instances* in which any nation was a party to a treaty embodying trade-balancing provisions. In the case of the first two, this is a reflection of barter policies and unfavorable trade balances which threatened the currencies of the nations involved. The precarious economic position of raw material-producing countries comprising the third group mentioned, with its consequent influence upon foreign exchange transactions is revealed in the relatively higher proportion of occasions in which these nations contracted obligations relating to the application of exchange control. Furthermore, the weaker currency position of Germany and the Balkan countries is demonstrated by the table which shows that a great number (in proportion to the number of nations involved) of occurrences of exchange control clauses are attributable to them. Germany, the Balkans, and Latin American nations again account for one-third of the total *instances* in which any nation was a party to an agreement containing exchange control provisions. The figures also show that Germany and the Balkans were parties to more clearing agreements than other nations. The total figures for exchange control provisions listed under the United States and Great Britain are not due to their employment of such control but to their treaty relations with other nations which do so. All of the exchange control provisions in American treaties are general in nature.

Finally, it can be safely said that with the exception of the United States, the new measures of trade control are confined to no one country or area of the world. The tabulated summary of data proves that quotas, exchange controls, and bilateral trade-balancing have been a frequent subject of treaty negotiation by most countries whether because of their own individual policy or that of other nations. In addition, the frequency of all commercial

[5] The two cases of specific quota provisions listed under the United States occurred in treaties with France and the Netherlands.

treaty negotiations as well as the employment of certain types of provisions generally correspond to the international economic position of nations or their avowed method of conducting foreign trade relations. Upon examination of the provisions recorded for the United States, the liberal trade policy followed by that nation is immediately evident. There is a substantial number of most-favored-nation clauses applied to non-tariff trade restrictions, no specific exchange control features, only two specific quota provisions, no clearing agreements, and only one case of bilateral trading, a barter agreement with Great Britain. On the other hand, the complex and state-controlled trade relations of Germany and the Balkans are confirmed not only by what has been said above, but by the figures showing that almost all of the treaties providing for intergovernmental control of trade and administration of agreements were contracted by this group. Within certain limitations, the summary indicates a greater treaty activity on the part of European nations than of others, for even a majority of the instances listed under the heading "all others" were those to which countries like Norway, Sweden, Finland, Estonia, Latvia, Belgium, and the Netherlands were parties.

Two additional factors which do not appear in the table are important. First, the duration of a commercial treaty generally reflects the expected stability of the trade which it governs. If the treaties of the last decade are any criterion, international economic exchange has been in a state of almost constant fluctuation. Of the 218 treaties specifying a time-limit 162, or 74 per cent, were concluded for one year or less, and very few treaties of longer than one year were entered into by the major economic powers. Most agreements have been of brief duration. Second, the provisions regarding the termination of recent commercial treaties demonstrate that nations have preserved a maximum of autonomy in matters of policy by making it possible to denounce conventions on comparatively short notice. Thus one-third of 249 treaties containing such clauses allowed the agreement to be terminated after two to eight weeks' notice; 119 provided for three months' notice; and 43 provided for six months' notice. Only 13 were required to continue in effect one year before denunciation becomes valid, although this last was the usual pre-World War treaty practice.

II

There are several different types of treaty provisions covering exchange controls and foreign exchange relations in general. Some clauses bear upon the relationship between national currencies. Article 10 of a treaty between Great Britain and France, June 27, 1934, provides that in the event of a large variation in the rate of exchange between currencies, the government whose interests have been prejudiced can "with a view to correcting the dis-

equilibrium" terminate the agreement on giving thirty days' notice.[6] Article III of the convention signed by India and Japan, July 12, 1934, confers the right on both parties to impose "other or higher duties" (than those affecting the most favored nation) in order to compensate or correct any effects of variations in the exchange value of the yen or rupee.[7]

The imposition of complete exchange control has led to the presence in commercial treaties of measures designed to have such control administered in a manner which will not work to the disadvantage of one of the contractants. This is clearly expressed in Article 6 of an agreement between Finland and Turkey, June 6, 1935, wherein Finland declares that it will place no restriction on the acquisition and free outgoing of foreign exchange in respect of Turkish exports.[8] The German system of blocked marks has given rise to agreements such as that between Canada and Germany, October 22, 1936, Article VII, which states that the German government will no longer permit in general such payment for Canadian exports as compensation, aski, or blocked marks.[9] In an exchange of notes on December 28, 1937, the Netherlands and Roumania take precaution against the choking effects of blocked balances on international trade by agreeing that the accumulation of sums not specially earmarked or utilized in guilders in the Netherlands clearing bank shall be avoided whenever possible.[10]

An excellent statement of the broad principle applied to the exigencies of exchange control is afforded in the temporary commercial arrangement between the United States and Italy, December 16, 1937. It merits quoting: "No prohibition, restriction, or delay on the transfer of payment for imports of articles . . . of the other High Contracting Party, or on the transfer of payments necessary for, and incidental to, the importation of such articles" shall be imposed in the event that either party establishes exchange control.[11]

As significant as the treaty provisions designed to ameliorate the difficul-

[6] France, *Treaty Series*, no. 1, 1934. The French-Swedish exchange of notes, March 13, 1933, is more specific, providing that France may withdraw all concessions if the existing ratio between French and Swedish currencies varies in a proportion of more than 20 per cent (League of Nations, *Treaty Series*, vol. 142-43, p. 133). Hereafter this series will be referred to merely as *L.N.T.S.*

[7] *L.N.T.S.*, vol. 155, 1934-35, p. 32. Similarly, Japan-Burma, June 7, 1937, *L.N.T.S.*, vol. 185, 1938, p. 186.

[8] *L.N.T.S.*, vol. 160, 1935-36, p. 167. See also, Spain-Turkey, Nov. 2, 1932 (*L.N.T.S.*, vol. 149, 1934, p. 17); Argentine-Netherlands (*L.N.T.S.*, vol. 148, 1934, p. 365).

[9] *L.N.T.S.*, vol. 173, 1936-37, p. 312; also New Zealand-Germany, Sept. 30, 1937 (New Zealand, *Treaty Series*, no. 35, 1938).

[10] *L.N.T.S.*, vol. 182, 1937-38, p. 365.

[11] *L.N.T.S.*, vol. 187, 1938, p. 16; along the same lines, Sweden-Yugoslavia, May 14, 1937 (*L.N.T.S.*, vol. 179, 1937-38, p. 149); Belgium-Estonia, Jan. 13, 1938, part ii (*L.N.T.S.*, vol. 185, 1938, p. 65); in some cases the obligation is positive in form, one or both parties pledging to "facilitate" payments or give "favorable consideration" to demands for exchange. Thus: Denmark-Spain (*L.N.T.S.*, vol. 163, 1935-36, p. 307) and Chile-Netherlands, May 4-5, 1937 (*L.N.T.S.*, vol. 182, 1937-38, p. 365).

ties of exchange control are those included to prevent discrimination in administration, and to apply the rule of most-favored-nation treatment. Thus Article 10 of an agreement between Great Britain and Germany, August 10, 1934, provides that if a diversion of trade handled by British firms occurs as a result of future exchange control measures taken by Germany, the latter will enter into immediate negotiations.[12] That the scope of even the most-favored-nation clause has been broadened to encompass exchange controls is illustrated by an exchange of notes between Spain and the Irish Free State, April 1-4, 1935, providing that Spain will assure foreign exchange for Irish exports under the same conditions as apply to the most-favored-nation.[13] Another agreement between the Netherlands and Uruguay, January 29, 1934, speaks of the "supply of currency" being on the basis of "equality."[14]

III

The terms and administration of quota agreements are illuminating as to the technique of this widely employed instrument of commercial policy. Any given treaty of this type may be general or specific. For example, the agreement between France and Great Britain, June 27, 1934, provides a broad framework within which French quotas on British exports are to be administered. Article 3 establishes exports from Great Britain on the basis of a "representative period," and this share is not to be reduced whether the global quota is reduced or not; the French Government pledges itself to notify the British Government when the quota is exhausted and to allow ten days' leeway to accommodate statistical error or changes of decision before suspending importation; deficiencies in the fulfillment of any quota by Great Britain will be carried forward to the next quarter, and, conversely, any surplus will be deducted from the next quarterly allotment; France will take into account seasonal variations in British production in making periodical allocations; should France wish to impose new quotas on industrial goods, a "temporary quota" based on the previous year will be used until an agreement can be reached; and under Article 4, France guarantees the existing percentage of coal imports from Great Britain in the "normal" quota.[15]

On the other hand, an agreement entered into by Japan and Great

[12] *L.N.T.S.*, vol. 155, 1934-35, p. 54.

[13] *L.N.T.S.*, vol. 166, 1936, p. 398; similar provisions are contained in agreements between: Argentine-Great Britain, Dec. 1, 1936 (Argentine no. 1, 1936, Cmd. 5324); Sweden-Guatemala, July 11, 1936 (*L.N.T.S.*, vol. 171, 1936-37, p. 304); South Africa-Belgium, July 13, 1937 (*L.N.T.S.*, vol. 182, 1937-38, p. 248); Finland-Roumania, Dec. 3, 1935, modified June 23, 1936 (*L.N.T.S.*, vol. 165, 1935-36, p. 289); Sweden-San Salvador, June 23, 1936 (*L.N.T.S.*, vol. 171, 1936-37, p. 296).

[14] *L.N.T.S.*, vol. 168, 1936, p. 45; see also: Norway-Uruguay, April 4, 1936 (*L.N.T.S.*, vol. 176, 1937, p. 117).

[15] Great Britain, *Treaty Series*, France, No. 1 (1936); Cmd. 4595.

Britain regulating the trade between Burma and Japan, June 7, 1937, is highly specialized and detailed, and affords proof of the complex conditions of trade to which quotas give rise. Article 3 permits 70,000 bales of raw cotton or 65 per cent of Japan's total imports of raw cotton (whichever is less) to be exported from Burma to Japan; 42 million yards of cotton piece goods will be imported by Burma from Japan. If in any year the cotton exports to Japan are less than the amount provided, the allotment of cotton piece goods from Japan shall be diminished by 300,000 yards for every 1,000 bales deficit. (Note the implied trade balancing.) Article 4 provides that the allotment of cotton piece goods in the first half of any cotton piece goods year (April 1 to April 1) shall equal 21 million yards and the same for the second half less anything above the first half quota. Article 5 states that if less than the prescribed allotment for any piece goods year is exported from Japan to Burma, a quantity of the deficit not exceeding 2,635,000 yards may be exported in the first half of the following cotton piece goods year. Article 7 divides cotton piece goods into four categories: (1) greys, (2) bleached (white) goods, (3) colored printed goods, and (4) colored (dyed or woven) goods. The sub-allotments for any year of these groups are 15 per cent, 10 per cent, 45 per cent, and 30 per cent, respectively. Transfers between these groups can be made, but the total allotment cannot be increased, and the amount transferred cannot exceed 20 per cent of the amount of the sub-allotment.[16]

There is a variety of methods for determining quotas. The "basic period" formula (that is, the previous period of trade upon which the quota is to be reckoned by percentage) is expressed in the Italian-Swedish accord of June 24, 1935, when the Italian Government promises to take Swedish goods to the extent of 80 per cent of the certified imports of each commodity in 1914.[17] Another method is a quota based upon a percentage of the total imports to be admitted. Belgium and the Irish Free State, for instance, agreed on January 6, 1937, that the Economic Union would grant a butter quota of 25 per cent of the global quota, a tinned meat contingent of 28 per cent, and a pork quantity of 5 per cent.[18] A third method is indicated in an exchange of notes between Great Britain and Germany, April 13 and May 3, 1933, wherein the latter agrees to accept not less than 180,000 metric tons of British coal per month.[19]

[16] *L.N.T.S.*, vol. 185, 1938, p. 186. Of the same comprehensiveness are these treaties: India-Japan, Oct. 12, 1937 (Great Britain, *Treaty Series*, no. 50, 1937, cmd. 5600) and Great Britain-Argentine, Dec. 1, 1936 (Argentine no. 1, 1936, cmd. 5324).

[17] *L.N.T.S.*, vol. 161, 1935-36, p. 23. Other base years or series of years are also used depending upon the nations concerned and the trade affected. Often the basic period varies with different items within the same treaty. Furthermore, the representative period may be laid down simply as a working principle with no definite date prescribed.

[18] Irish Free State, *Treaty Series*, No. 1 (1937), cmd. 5562, *cf.* Spain-Uruguay, Jan. 2, 1935 (*L.N.T.S.*, vol. 164, 1935-36, p. 107).

[19] *L.N.T.S.*, vol. 140-141, 1933-34, p. 140. Norway-Spain, June 13, 1936. (*L.N.T.S.*, vol. 170, 1936-37, p. 201); also Spain-Denmark, Aug. 17, 1935.

Quite naturally, quotas have become a bargaining instrument. An agreement between France and Sweden clearly substantiates this. Referring to the French quota, it states: "The advantages specified above shall be granted to Sweden on condition that the Royal Government consents to the following reductions in customs duties in respect of the French Goods listed below. . . ."[20] Similarly, the quotas extended to New Zealand by the Netherlands were conditional upon the granting of most-favored-nation tariff treatment on certain items of New Zealand.[21] France exchanged quota increases for tariff reductions on the part of Portugal.[22] Article I of the commercial treaty between Italy and Sweden, December 1, 1936, provides that Sweden will refrain from imposing quotas on Italian exports in return for special preferential quotas on Swedish imports into Italy.[23]

Finally, there are certain quota provisions intended to prevent discrimination and to allow as much trade as possible to move despite quantitative regulation. The Irish Free State agreed in 1935 that in the operation of all import restrictions, due regard would be had for "the established German trade."[24] Equality of treatment is explicit in an agreement between Belgium and Australia, November 19, 1934. Both parties agree: ". . . that in the operation of any system of controlling imports, no product . . . of the other country . . . shall be accorded treatment less favorable than that accorded the most favored foreign country on like products. . . ."[25] Belgium and the Netherlands will not apply quantitative restrictions to the products of chief interest to each other without limiting the disadvantages therefrom.[26]

IV

Bilateralism, the theory that what one nation buys from another is somehow dependent upon what that nation sells to the other, is firmly entrenched as a concept of present-day international trade. There are, of course, degrees of bilateralism; at one extreme is a mere recognition of the

[20] *L.N.T.S.*, vol. 176, 1937, p. 269.

[21] Dec. 22, 1937 (*L.N.T.S.*, vol. 185, 1938, p. 330).

[22] *Revue des Lois, Décrets, et Traités de Commerce de l'Institut International du Commerce*, vol. 8, Sept., 1932, p. 218. See also, Sweden-France, Jan. 18, 1936; Switzerland-New Zealand (*L.N.T.S.*, vol. 189, p. 168). Incidentally France retains the right to bargain with the remainder of any aggregate quota after various allotments have been fulfilled. (Sweden-France, Feb. 17, 1937. *L.N.T.S.* vol. 176, 1937, p. 269.) Usually 75 per cent of a given quota is reserved for this purpose.

[23] *L.N.T.S.*, vol. 173, 1936-37, p. 259. Italy was the first important country to employ quotas as a method of reprisal. See Heuser, *Control of International Trade* (London, 1939), p. 43.

[24] Irish Free State, *Treaty Series*, no. 1, 1935.

[25] *L.N.T.S.* vol. 155, 1934-35, p. 386. Great Britain-Lithuania, July 6, 1934, Article 5; Spain-Norway, June 13, 1936, Articles IV-V.

[26] *Revue*, vol. 8-9, 1932-33, p. 42.

principle, at the other is barter. At any rate, there is an unmistakable tendency in current commercial treaties to force trade into rigid channels between pairs of nations.

A mild expression of bilateralism is found in part 1 of the protocol to a treaty between Great Britain and Denmark which pledges both nations to keep in view the balance of trade between them.[27] The same rule prevails in an agreement signed by Great Britain and Estonia, and in addition Estonia recognizes that the existing disparity in their balance should be readjusted by an increase of British sales in Estonia.[28] In June, 1933, Albania and Greece concluded an accord whereby the importation of Albanian merchandise into Greece is regulated so that the value thereof will be superior to the value of Greek exports to Albania by 20 per cent during the first three-month period after the agreement and 15 per cent thereafter.[29] More extreme than the above illustrations is this passage from a Belgian-Estonian treaty of January 13, 1938: "The High Contracting Parties agree that it shall be their object to achieve equilibrium in their commercial exchanges, *this being a fundamental principle in their economic relations.*"[30] A pseudo-barter transaction is implied in an agreement in which Belgium limits the granting of import licenses for Australian frozen meat to an amount equivalent to the total value of Belgian sheet glass authorized to be imported into Australia.[31]

One of the outstanding examples of trade balancing between major economic powers is the temporary commercial agreement between Great Britain and the U.S.S.R., February 16, 1934, which entails a gradual balancing of trade over a period of years. Article 3 provides that the payments of the U.S.S.R. in the United Kingdom shall bear to the proceeds due the U.S.S.R. in the year ending December 31, 1934, the proportion of 1:1.7; in the year ending December 31, 1935, 1:1.5; in 1936, 1:1.4; in 1937, 1:1.2; and subsequently, 1:1.1.[32]

Germany has been the most prolific source of barter arrangements, the essence of bilateralism. Only a few instances can be cited here. In March, 1939, Germany exchanged barbed wire, nails, Diesel trucks, hardware, and pharmaceutical products for Nicaraguan cotton, coffee, rubber and hides.[33] In the previous month the same two countries bartered 20,000 bags of coffee and an equivalent amount of German hardware and medical supplies.[34] On February 11, 1939, it was announced that Mexico would

[27] April 24, 1933 (*L.N.T.S.*, vol. 139, 1933-34, p. 129).

[28] July 15, 1933, Paragraph 4 of an exchange of notes.

[29] *Revue*, vol. 9, Sept., 1933, p. 253.

[30] *L.N.T.S.*, vol. 185, 1938, p. 65. Almost identical wording: France-Venezuela, August 8, 1938 (*Revue*, Dec., 1938, p. 400).

[31] *L.N.T.S.*, vol. 147, 1934, p. 23.

[32] Great Britain, *Treaty Series*, no. 2 (1934) Cmd. 4567.

[33] *New York Times*, March 28, 1939, p. 5.

[34] *Ibid.*, Feb. 19, 1939, Section III, p. 4.

give Germany $2,000,000 worth of oil in payment for machinery and 10,000 tons of newsprint.[35] Nor has barter been confined to Germany, Italy, and other totalitarian states: on June 24, 1939, the United States and Great Britain completed an exchange of 85,000 tons of Malayan rubber for 600,000 bales of American cotton.[36]

Aside from direct barter, there are at least three ways of achieving balanced trade. First, it may be agreed that the foreign exchange accruing from the sale of goods between two nations can be used only to purchase each other's products.[37] Second, equilibrium is preserved by a provision that if one nation has a favorable balance it will allow importation from the other until the deficit has been made up.[38] A third method consists of an obligation by the contracting parties to refrain from imposing normal trade restrictions, *i.e.*, quotas, etc., when balance of trade is favorable to one or the other.[39] It should be pointed out that perfect balance is not always anticipated in the agreements which fall in this class. The advantage may be as much as 50 per cent in favor of one country; but the underlying principle of bilateralism nevertheless operates.[40]

V

The reluctance of nations to consolidate their commercial policies in conventions without being able to recover their freedom of action quickly if the occasion demands is discernible in a group of treaty provisions best described as "escape clauses." In the event of a sudden alteration in the basic conditions underlying an agreement, whether because of the failure of certain provisions to materialize favorably, measures taken by one of the parties to a treaty, or the nullification of concessions, nations usually agree that a given accord can be changed or denounced. Examples are again numerous, appearing in 72 agreements.

By far the most common practice is that when one contractant takes action prejudicial to the other's interest, the abused party has the right to petition for negotiation to correct the situation; if no agreement is

[35] *Ibid.*, Feb. 11, 1939, p. 1.

[36] *Ibid.*, June 24, 1939, p. 1. In addition, Turkish tobacco has been exchanged against Austrian manufactured goods; Brazilian coffee against Polish rails; Argentinian maize against Spanish rails; and American wheat against Brazilian coffee. (League of Nations, *Review of the Principal Tendencies of Present Commercial Policy.* Conf. M. E. II, London, June 26, 1933.) Recently a special type of barter system, still governed by quotas and by compensating arrangements, was established between France and Roumania, Poland and Yugoslavia (*New York Times*, March 1, 1939, p. 1).

[37] Article II, Greece-Sweden, January 17, 1935; Great Britain-Italy, March 18, 1935.

[38] Finland-Greece, July 27, 1934, Article III (*L.N.T.S.*, vol. 153, 1934, p. 43); Italy-Sweden, June 24, 1935, par. 4 (*L.N.T.S.*, vol. 161, 1935-36, p. 23); Italy-Norway, July 2, 1935 (*L.N.T.S.*, vol. 162, 1935-36, p. 317).

[39] Poland-Great Britain, Feb. 27, 1935, Art. 2 (*L.N.T.S.*, vol. 162, 1935-36, p. 180).

[40] Austria-Hungary, Dec. 21, 1932 (*L.N.T.S.*, vol. 169, 1936-37, p. 289).

forthcoming after a set length of time, the treaty may be terminated.[41]

More often than not, an escape clause becomes operative only upon the development of definitely stated conditions. For example, if at any time during a year the quantity of sheep's wool imported into Japan is less than 266,667 bales, Australia has the right to modify the quotas granted to Japan after consultation between the two governments.[42] Likewise, most of the quota agreements entered into by Great Britain contain a provision giving that nation the right to denounce its obligations when the amount of British coal imported by the other contracting party falls below a specified percentage of its total coal imports in any one month.[43]

Article 2 of the agreement between Great Britain and the U.S.S.R., cited above, provides that if prices are being created or maintained by the other party or by its state economic organizations in a manner likely to frustrate the advantages accorded, the two nations will immediately enter into negotiations. Failing settlement, the wronged party may cease to apply the most-favored-nation treatment laid down in Article 1.[44] According to the protocol signed by Poland and Sweden, October 21, 1933, each country can withdraw tariff concessions if the other alters its rates of duty, apparently without negotiation.[45]

VI

Governments have always exerted an influence upon international trade, but the distance to which this interference has been carried since 1931 forms a new chapter in the economic life of mankind. Clearly, quotas, exchange controls, and trade balancing imply comprehensive supervision of foreign trade by national agencies. It is inevitable, therefore, that the many agreements here analyzed should have one thing in common. They presuppose, in most cases, the strictest kind of regulation of the movement of goods between the parties concerned. Hence a new type of treaty provision, establishing inter-governmental coöperation and control, has evolved.[46]

One example is given by Article 16 of a clearing agreement between Germany and the Netherlands, December 5, 1934: "To ensure as far as possible the smooth operation of the payments system, the two Contracting

[41] Hungary-Yugoslavia, May 15, 1933, Art. 3 (after one month, fifteen days notice); Australia-Belgium, Dec. 14, 1933 (after six months, one month notice); Albania-Czechoslovakia, April 9, 1934, Article 2 (after one month, fifteen days notice); Poland-Switzerland, Feb. 3, 1934, Article V; Austria, Hungary, December 21, 1932, Final Protocol; Germany-Canada, Oct. 22, 1936, Article VII; Japan-India, July 12, 1934, Article 4.

[42] May 5, 1938 (*L.N.T.S.*, vol. 189, 1938, p. 168).

[43] Great Britain-Sweden, May 15, 1933: 47 per cent; Great Britain-Iceland, May 19, 1933: 77 per cent; Great Britain-Norway, May 15, 1933:70 per cent; Great Britain-Estonia, July 15, 1933: 85 per cent; Great Britain-Latvia, July 17, 1934: 70 per cent.

[44] Great Britain, *Treaty Series* no. 11 (1934) Cmd. 4567.

[45] *L.N.T.S.*, vol. 150, 1934, p. 75.

[46] Some 27 treaties and agreements have these provisions; by inference others might be included.

Parties shall regulate the movement of the exchange of goods as required."[47] That commercial treaties now give rise to complex difficulties is proven by the presence of clauses providing for joint coöperation in the solution of such difficulties.[48] The final protocol to an accord between Germany and Sweden, August 28, 1934, goes even further in stating that each government shall set up a special committee to engage in "permanent direct consultation" with the other.[49] Often a mixed body consisting of delegates from both parties is created to keep trade under rigid surveillance and to propose "such measures as are calculated to influence trade in the direction agreed upon."[50] Falling short of this more or less complete control are a number of provisions which can result only in more drastic regulation. Two nations may, for instance, exchange lists of products in which both are interested in order to have regard for "normal currents of trade between their respective territories."

VII

What conclusions, in addition to those mentioned in section I, can be drawn from the foregoing survey? To begin with, it is no longer correct to speak of quotas, exchange controls, and bilateral trading as "temporary" measures. These instruments of commercial policy, regarded as expedients during the initial period of economic distress after 1930, have persisted in spite of sporadic relaxations and brief spells of recovery.

Prior to 1931, the flow of trade was determined in the main by the functioning of the price system. Furthermore, trade agreements served as a medium through which the movement of goods was expanded. But at the present time, much, although not all, foreign trade is directed not by price differentials or other purely economic considerations, but by governmental control for political or national purposes, and recent commercial treaties as a rule do not allow for the expansion of trade because they precisely define, both qualitatively and quantitatively, the trade between the contracting parties. The structural nature of commercial treaties has been basically transformed; by and large, instead of setting up a broad framework of general conditions of trade, they have become narrow directional channels of trade control.

Along with this change in treaty structure has come a change in the

[47] *L.N.T.S.*, vol. 160, 1935-36, p. 123.

[48] Hungary-Yugoslavia, May 15, 1933, Article 4 (*L.N.T.S.*, vol. 144, 1934, p. 323).

[49] *L.N.T.S.*, vol. 154, 1934-35, p. 259. Similarly Germany-Latvia, Dec. 4, 1935; Germany-Hungary, Feb. 21, 1934; and Germany-Netherlands, June 6, 1934.

[50] Austria-Hungary, Dec. 31, 1932 (*L.N.T.S.*, vol. 169, 1936-37, p. 289); Spain-Yugoslavia, May 15, 1936 (*L.N.T.S.*, vol. 170, 1936-37, p. 175). In order to give effect to the foreign trade monopoly of its government, the Soviet Union establishes a "Trade Delegation" in the country of the other contracting party of its commercial treaties, the purpose of said delegation being to regulate the trade of the Union in regard to foreign nations. *Cf.* Latvia-U.S.S.R., Dec. 4, 1933 (*L.N.T.S.*, vol. 148, 1934, p. 163).

underlying philosophy of trade negotiations. The international trade carried on by most countries represents a series of exclusive bargains between governments on the basis of strict reciprocity. The principle of bilateral bargaining is now fully as important, if not more so, as the principle of equality of treatment which up until 1929-30 could rightly be called the foundation of commercial treaty relationships. This is not to say of course that the most-favored-nation clause has entirely disappeared as a regulative factor in such relationships, but the conclusion seems inevitable that many nations, particularly European, consider their freedom of action and ability to negotiate with individual nations without regard to their trade relations with other nations more vital than protection against discrimination in foreign markets.

Another observation should be made. It can be assumed that most governments in the world have the power to subjugate external trade to complete control, beginning with the exclusion of foreign products from the domestic market and ending with the complete regulation of internal production. Under such conditions, it is obvious that the influence of the economic foreign policy of one state upon another is greater than when the most that can happen is a raising or lowering of tariff rates. Hence the tempo of international economic conflict is heightened when the total strength of a nation is brought to bear upon its trade with other nations.

A consideration of the general effects of this new situation is beyond the scope of this study, but this much can be said: the treaties and agreements quoted above represent in the last analysis an extreme decrease in international specialization, hitherto the basis of most trade connections. Through them the trading area for many nations has been successively narrowed. As a result there has been a reduction in national wealth and productive capacity,[51] a marked rise in the cost of living in many countries,[52] a decrease in the barter terms of trade,[53] and, finally, a limitation of economic welfare generally.

To conclude, the dominant trend in commercial negotiations has been, and still was until the beginning of hostilities in September, 1939, in the direction of further intensification of trade restrictions and more highly organized state regulation. The tension of the past four years has culminated in the present war in Europe, and it is to be expected that, aside from the destruction of commerce which will result, current tendencies in commercial policy will be intensified.

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[51] Staley, *World Economy in Transition* (New York, 1939), p. 241.
[52] Heuser, *Control of International Trade* (London, 1939), p. 251.
[53] League of Nations, *Review of World Trade, 1936* (Geneva, 1937), p. 38.

MEASUREMENTS OF THE EFFECTIVENESS OF THE NATIONAL LABOR RELATIONS ACT

The test for the effectiveness of the National Labor Relations act is to be sought in the degree to which it achieves its specific purpose of helping to abolish disputes over labor's right to organize and bargain collectively, a question coinciding only partially with that regarding industrial peace at large.

To gauge this development numerically the following methods are used: The degree to which labor in its struggle against "unfair labor practices" is resorting to the NLRB rather than to strikes is measured through the ratio of "pure" complaint cases (that is those in which strikes were not also resorted to) and "organization strikes in disputes under the Board's jurisdiction," while the degree to which labor uses the Board merely in addition to strikes rather than in the place of strikes is measured through the ratio of "strike-complaint cases" to pure complaint cases. The trend of the employers' compliance with the Act is inferred from the yearly total number of disputes over "unfair labor practices." The number of organization strikes in disputes under the Board's jurisdiction in comparison to those not under the Board's jurisdiction is used as additional indicator of the effectiveness of the Act.

These several indices are calculated as nearly as the published records allow, and graphically represented.

The picture of the development so obtained is regarded as promising. Labor is coming to settle disputes over "unfair labor practices" increasingly through the NLRB rather than through strikes; the ratio of strike-complaint to pure complaint cases is beginning to diminish, and organization strikes in disputes under the Board's jurisdiction are diminishing faster than those not under the Board's jurisdiction. Most of all, the total number of disputes over the outlawed unfair labor practices has noticeably declined since the last year, following a strong increase during the first three years of the operation of the National Labor Relations act.

x

Purpose of the Labor Relations act.—In view of the flood of criticism of the National Labor Relations act and its administration by the NLRB, it is of great importance to possess reliable indices for gauging the effectiveness of the Act in achieving the purpose for which it was designed. This purpose was to enforce labor's right to organize and bargain collectively, a purpose apparently conceived in the idea that independent organizations of workers and employers bargaining with each other on equal terms constitute the industrial set-up best suited to a democracy with an, as yet, comparatively liberalistic economic system.[1]

Of course, it was hoped that such "functioning trade unionism" will eventually also mean more peaceful industrial relations, with strikes and lockouts largely replaced by organized negotiations aided by mediation and arbitration. Indeed, the Labor Relations act expresses the conviction that such will be the results of established collective bargaining:

> Experience has proved that protection by law of the right to organize and to bargain collectively safeguards commerce from injury, impairment or interruption, and promotes the flow of commerce by removing certain recognized sources

[1] Totalitarian states, on the other hand, have found governmentally controlled common organizations of workers and employers better suited to their political and economic systems. The fact that trade unionism in the United States has come to be made governmentally enforceable might perhaps raise the question in one's mind as to the continued "liberalistic" character of this institution.

of industrial strife and unrest, by encouraging practices fundamental to the friendly adjustment of industrial disputes arising out of differences as to wages, hours, and other working conditions, and by restoring the equality of bargaining power between employers and employees.[2]

Yet it is to be noted that these two purposes, to promote collective bargaining, and to promote industrial peace, are not in themselves identical; in fact, they may at times diverge considerably. Thus the encouragement given by the Labor Relations act to union organization, in the face of largely unwilling employers and of initial great uncertainty as to the constitutional standing and jurisdictional scope of the Act has, transitionally at least, doubtless stirred up rather than pacified industry. But even in the long run, with collective bargaining securely established, strikes over the terms of agreements to be made may conceivably assume far larger proportions than in a non-organized state of industry.[3]

Hence it is hardly reasonable to judge the effectiveness of the Act—as is widely done by both its friends and foes—by comparing the number and extent of strikes before and since its operation. More discriminating criteria in terms of specific purposes achieved must be used.

Criteria for judging the effectiveness of the Labor Relations act.—Ultimately the most significant criterion is, of course, the growth of collective agreements. For, although the Labor Relations act does not—and could not without introducing compulsory arbitration—require that collective bargaining must result in agreements, yet a continued, marked increase in the percentages of workers in the various "interstate" industries working under collective agreements would doubtless be a strong indication that the purpose of the Labor Relations act is being accomplished.[4]

[2] Pub. no. 198, 74 Cong. (S. 1958), 1935, sec. 1.

[3] In fact the average yearly number of man-days per wage earner lost through strikes has not been larger in the United States than in countries with reputedly well developed trade unionism. Thus in the United States between 1931 and 1936, the average yearly number of man-days lost was approximately 14 million for a total of about 40 million wage earners, or .35 working-day per wage earner per year. (Calculated from "Strike Summary," *Mo. Labor Rev.*, May, 1937, p. 1112.) For Sweden the corresponding figures are: 1.8 million man-days per year for about 2 million wage earners, or .9 working-day per wage earner per year. For Denmark: average of .5 million man-days per year for about .9 million wage earners or .55 working-day per wage earner per year. For Great Britain only the figures are smaller: average of about 3.3 million man-days per year for about 16 million wage earners, or about .2 working-day per wage earner per year. (Calculated from *Year Book of Labor Statistics*, I.L.O. Geneva, 1938, Table XXIX, pp. 234-36, and Table III, pp. 8-15.) Thus, if industrial relations in the United States compare unfavorably with those countries, it is not in the extent of strikes, but rather in the often violent and ruthless methods with which employers and unions have fought respectively against and for union organization. This is exactly the situation which the Labor Relations act was designed to remedy.

[4] For this purpose more complete records would be needed than are now existent. At present complete records of agreements exist only in the railroad industries where all agreements must be filed with the National Mediation Board. As to other industries, the Bureau of Labor Statistics and more recently also the NLRB are endeavoring to obtain

Yet whatever progress is being made in this direction, it is also true that open strife over the principles of organization and collective bargaining is continuing, strife of the very kind which the Labor Relations act was meant to eliminate. Can the extent and hence the trend of this particular kind of strife be measured, and if so, does it show signs of relenting or not?

This question has two distinct aspects. The one concerns the degree to which labor in its struggle against the outlawed "unfair labor practices" is adopting the peaceful, judicial machinery of the NLRB in the place of strikes. The other, more basic in fact, concerns the degree to which employers are coming to comply with the Act by ceasing to interfere with the workers' organizations and by bargaining with them collectively.

An answer to the first question can apparently be found by comparing the number of disputes over unfair labor practices submitted to the NLRB with those in which strikes were resorted to. The trend of employers' compliance, on the other hand, may be gauged from the total number of disputes—for instance per year—over unfair labor practices, whether settled through the Board or through strikes; for in either event such disputes reveal, at least alleged, non-compliance with the Act by an employer.

The NLRB itself, in its two last annual reports,[5] has sought to demonstrate the effectiveness of the Act as a pacifier of industry by answering the first of these questions, without raising the second one. That is, it has satisfied itself that the ratio of "board cases" to strikes, and in particular to "organization strikes" has greatly increased, especially since the validation of the Act through the Supreme Court decisions of April, 1937.[6] The crucial question regarding the total yearly number of disputes over unfair labor practices, however, has been left out of sight.

It is the purpose of this article first, considerably to modify the figures used in the NLRB's comparison ratio between "board cases" and strikes, so as to obtain what in our opinion is a more significant index of labor's relinquishing strikes in favor of resort to the Board; and second, to show how out of these modified figures the total number of disputes can be obtained in terms of which to gauge the employers' compliance with the Labor Relations act.

A. Board cases to be considered.—The cases submitted to the Board fall into two distinct classes: "complaint cases," in which a labor organization charges an employer with one or several unfair labor practices forbidden by

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as many agreements as possible. But the filing of agreements with them is voluntary only; this, and moreover the highly decentralized character of collective bargaining in many industries, makes those records necessarily rather incomplete.

[5] NLRB, *Third Annual Report,* pp. 1-3, Appendix A, pp. 285-288, *Fourth Annual Report,* pp. 2, 3, Appendix A, pp. 189-199.

[6] Assoc. Press *vs.* NLRB, 301 U.S. 103; Washington, Virginia and Maryland Coach Comp. *vs.* NLRB, 301 U.S. 142; NLRB *vs.* Jones and Laughlin Steel Corp. 301 U.S. 1; NLRB *vs.* Fruehauf Trailer Comp. 301 U.S. 49; NLRB *vs.* Friedman, Harry, Marks Clothing Co. 301 U.S. 58.

the Act, and "representation cases," in which a labor organization or, under the new rules also an employer, petitions the Board to determine by certification or election which of two or more labor organizations is to act as collective bargaining agency for the employees.

Obviously only the complaint cases are of significance in measuring the degree to which labor in its struggle for the right to organize and bargain collectively is adopting the machinery of the Board. The representation cases, indeed, are indicative of a totally different phase of the situation—namely, of the extent and degree of labor's disunity. This phase of industrial strife, it is true, has come to assume increasingly large proportions, and to occupy the Board more and more in a peculiarly thorny and thankless manner, largely because of the schism in the ranks of organized labor.[7] But this civil war of labor, important though it is in itself, should not be allowed, by lumping together into one figure both complaint and representation cases, to overlay and thus possibly to distort the labor-employer relationship under consideration.

Yet not even all complaint cases are to be counted in this connection. For there are many instances in which strikes were already in progress when the complaint was submitted, often followed by lockout and all manner of violence. In such "strike-complaint" cases, the machinery of the Board is thus used not in place of, but rather in addition to, strikes.[8] To compare the instances in which resort to the Board means refraining from strikes—let us call them "pure complaint cases"—the number of strike-complaint

[7] The ratio of representation cases to complaint cases has greatly increased during the first three years of the Board's activity, and slightly declined during the fourth year. The exact figures are: 203/865 or .23 during the first fiscal year, 1,268/3,124 or .40 during the second, 3,569/6,807, or .51 during the third, and 2,286/4,618 or .49 during the fourth year. (NLRB, *1. Ann. Rep.* pp. 33, 40; *2. Ann. Rep.* pp. 18, 25; *3. Ann. Rep.* pp. 27, 39; *4. Ann. Rep.* pp. 34, 44.) The several State Labor Relations Boards report similarly large or larger ratios. Thus the figures for New York in 1938 were 408/383 or 1.06. What a perversion of the original purpose of the Board this unforeseen warfare in the ranks of organized labor has come to mean was forcefully brought out in the testimony before the House Committee investigating alleged unfairness of the NLRB in its rôle as umpire between AFL and CIO, Dean Lloyd K. Garrison recommending to amend the Wagner act so as to relieve the Board completely of this task.

[8] In such strike-complaint cases, if the employer is found guilty of the unfair labor practice which occasioned the strike, the Board orders reinstatement, as far as possible, of all strikers into their previous positions, unless found guilty of strike violence, with pay from the day the order is issued. Under this rule the Board reinstated during the third and fourth fiscal year respectively 88,191 and 51,660 strikers, over against only 6,630 and 7,738 workers reinstated after discriminatory dismissal. (NLRB *3. Ann. Rep.* p. 22; *4. Ann. Rep.* pp. 21, 23.) This simultaneous resort of labor to self-help through strikes and to governmental help through the Board seems one of the most precarious features in the situation, and one in its consequences most keenly resented by the employers. For it is fraught with legal uncertainty, because of the difficulty of drawing a line between strike violence and legitimate strike activity; and because of this uncertainty on the one hand, and the possibility of having the Board's reinstatement-order set aside by a United States District Court on the other hand, the time elapsing between the issuance of the order and the eventual compliance therewith, for which back pay must be paid, is often very considerable.

cases should obviously be deducted from the total number of complaint cases.[9]

B. Strikes to be considered.—To measure the degree to which labor is substituting the machinery of the Board for strikes naturally only such strikes should be counted where labor might have turned to the Board instead, that is, strikes in disputes under the Board's jurisdiction.

This consideration rules out, first of all, strikes where wages and hours or other specific working conditions are the sole issue, for the Board has nothing whatever to do with disputes of this kind. Hence the comparison of complaint cases to "organization strikes" is far more significant than to "all strikes." But even among the "organization strikes" are large classes of disputes quite outside the Board's jurisdiction.

The issues listed by the Bureau of Labor Statistics under "organization" issues are: Recognition; Recognition and Wages; Recognition, Wages and Hours; Closed Shop; Violation of Agreement; Discrimination; Others.[10] Among these only disputes involving the issues of recognition and discrimination may fall under the National Labor Relations act, not however those over the closed shop, violations of agreements (nor probably those listed under "others").

As regards the former, while the Act specifically declares closed shop agreements as legal,[11] it is yet by no means an "unfair labor practice" for an employer to reject the closed shop. Thus, since labor could not submit such disputes to the Board even if it wished to, they should, in the present connection, be deducted from the "organization strikes."[12]

Similarly to be deducted are strikes over violations of agreements.[13] For the National Labor Relations act does not confer jurisdiction over such disputes to the Board, nor has the latter assumed such jurisdiction by way of interpretation or practice (a policy well in line with the specific aim of the Act merely to remove obstacles to organization and collective bargain-

[9] The NLRB (*loc. cit.*), in comparing labor's recourse to the Board in the place of strikes, includes among the "board cases" both representation and strike-complaint cases.

[10] Monthly strike analysis as published in the *Mo. Labor Rev.*

[11] *Loc. cit.* sec. 8, 3.

[12] Closed shop strikes have greatly increased during the last few years. Their yearly percentages among all strikes have varied from 5.5 in 1936 to 7.3 in 1937, 12.8 and 12.4 in 1938 and 1939 respectively. (Computed from the monthly strike analyses, *Mo. Labor Rev.* for the respective years.)

[13] Figures concerning strikes over violations of agreement have not been given regularly in the strike analyses of the Bureau of Labor Statistics. In the months for which they were published (mostly during 1936, 1937), they varied between 1 and 2 per cent of all strikes, although the number of workers involved has amounted to as much as 18 per cent in a single month. It may be safely assumed that disputes of this kind have for a time increased under the operation of the Labor Relations act, and later declined again. For in those industries where to work under agreements is a novel experience to both labor and management, observance of terms, and orderly resort to quasi-judicial arbitration procedure in case of alleged violation develop only with time. The experience of General Motors with its first, hard-fought-for agreement with the UAWA serves to illustrate this point.

ing, not also to provide assistance to already functioning trade unionism).[14]

Finally, even among the actual "unfair labor practice" issues are a great many disputes not under the jurisdiction of the NLRB—namely, all those occurring in "intrastate industries."[15] In the great majority of states no law has as yet lifted disputes over the right to organize and to bargain collectively into the sphere of adjudicability. Only in the few states with labor relations acts in force[16] can they be submitted to the respective state labor relations boards (or their equivalents, such as the Wisconsin Employment Relations Board); in all others where labor wants to press the issue, strike is its only resort. Hence strikes in disputes of this kind should not be allowed to enter into an index meant to gauge the effectiveness of the NLRB in substituting judicial procedure for strikes.[17]

This class of "organization strikes not under the Board's jurisdiction," although to be excluded in the present connection, is, however, of great interest in itself. For these strikes reflect the developments under conditions where the National Labor Relations act has probably "stirred up industrial unrest" by encouraging demand for union organization and collective bargaining while not also providing governmental boards for the adjudication of disputes over these issues.

C. Formulation of indices.—After these several reductions of the figures for board cases and strikes are made, the degree to which labor substitutes the machinery of the Board for strikes is measured with fair accuracy through the ratio between "pure" complaint cases and organization strikes

[14] On this point, see "Labor Disputes on Rights and on Interests," *Am. Econ. Rev.*, June, 1939, pp. 308-09. Adjudication of disputes over violations of agreements by either employers or employees, on the other hand, is provided in the State Labor Relations act of Wisconsin as amended in 1939 (Statutes of Wisconsin, ch. 111, sec. 111.06, 1f and 2c). The railroad industries provide likewise for obligatory adjudication of such disputes through the National Railroad Adjustment Board (Pub. no. 442, 73rd Cong., 1934, sec. 3). In other industries only the quasi-judicial machinery set up in the agreement itself—if any, is available for this purpose, such as a permanent impartial chairman or arbitration board. Not infrequently agreements nowadays provide that disputes over the interpretation, application or violation of the agreement shall be submitted for final and binding adjudication to a regional or state labor relations board. Under such circumstances, however, these boards are not acting in their official capacity.

[15] The number of organization strikes in intrastate industries cannot be inferred from the published data of the Bureau of Labor Statistics, for want of the necessary cross-classification of issues and industries. The original data in the hands of the Bureau would, however, allow a fairly accurate classification of organization disputes into interstate and intrastate. According to a recent study the percentage of *all* strikes in intrastate industries to strikes in all industries has varied from 33 in 1937 to 39 per cent in 1938. (Computed from Morris Weiss, "Savings Resulting from the Effective Operation of the National Labor Relations Act in 1938 as Compared to the Cost of Its Operation," *NLRB*, June 15, 1939, p. 4, table A.)

[16] Mass. Laws of 1937, ch. 436, New York Laws of 1937, ch. 443, Penn. Laws of 1937, no. 294, amended by act no. 162, 1939. Wisconsin Statutes, ch. 111 (State Labor Relations act of 1937, amended by Employment Peace act of 1939), Utah Laws of 1937, ch. 55.

[17] The strikes over unfair labor practices in the state with labor relations boards might be counted in this connection, if at the same time the complaints submitted to those several state boards were added to those submitted to the NLRB.

in disputes under the Board's jurisdiction. The ratio between strike-complaint cases and pure complaint cases, on the other hand, indicates the degree to which labor is using the Board merely in addition to rather than in the place of strikes.

Out of these same figures one can arrive also at the yearly total of disputes over the outlawed unfair labor practices to be used as a yardstick for the employers' compliance with the Labor Relations act. This total is essentially the sum of the number of organization strikes under the Board's jurisdiction and of the pure complaint cases. (The strike-complaint cases, figuring already among the above class of strikes, must be deducted from the complaint cases in order not to be counted twice.) More accurately, however, one should further deduct all those many complaint cases which the Board dismisses—either before or after formal hearing—as not based on unfair labor practices within the meaning of the Act. Otherwise what are really misconceptions or misinterpretations on the part of labor as regards its rights under the Act would be allowed to figure in the index as employers' non-compliance.[18]

Finally the strike figures arrived at by separating organization strikes into those within and those outside the Board's jurisdiction represent in themselves valuable indicators of the effectiveness of the Labor Relations act in abolishing, within the sphere of its jurisdiction, open strife over the right to organize and bargain collectively.

These several ideas concerning the forming of indices we next express in mathematical symbols:

Let C represent the number of complaint cases filed per fiscal year with the NLRB, C_s the number of strike-complaint cases among them, $C_p = C - C_s$ the number of "pure" complaint cases, and C_d the number of complaint cases dismissed as not based on "unfair labor practices." Let S represent the total number of strikes begun during the same period; S_o the number of "organization strikes" among them, S_{ob} the number of such strikes in disputes under the jurisdiction of the NLRB, and ${}_bS_o = S_o - S_{ob}$ the number of organization strikes in disputes not under the Board's jurisdiction.[19]

[18] The number of cases dismissed by the Board for lack of jurisdiction is considerable, amounting to an average of 12 per cent of all complaint cases, during the third fiscal year alone to almost 20 per cent. These figures, however, comprise two distinct classes of complaints: those dismissed because the industry in question is not "interstate," and those in which no "unfair labor practice" was found to have existed. For the present purpose, it seems, only the latter should be deducted; for although an employer in an "intrastate" industry, who refuses to recognize labor's right to organize and bargain collectively, is not under the compulsion of the National Labor Relations act, he is yet violating those principles which Congress established for this country. The figures as published in the annual reports of the NLRB, unfortunately do not allow one to separate the two classes of dismissed cases.

[19] In addition to the number of cases the number of workers involved should always be considered.

The degree to which labor is using the judicial machinery of the Board in the place of strikes is then measured through the ratio C_p/S_{ob};[20] while the degree to which the Board is used in addition to rather than in the place of strikes is measured by the ratio C_s/C_p.

The trend of employers' compliance or rather non-compliance is shown in the total yearly number of disputes $D = S_{ob} + C_p - C_d$.[21]

Finally the values of S_{ob} and ${}_bS_o$ themselves or, more significantly, the ratio between them may serve to reveal the trends of organization strikes in disputes under the Board's jurisdiction on the one hand, and in those outside the Board's jurisdiction on the other.

D. Calculation of indices.—These several indices are next calculated for the first four years of the operation of the Labor Relations act, as nearly as the necessary data can be gathered from the official published figures.[22]

The time series for our indices are next shown graphically. The yearly figures have been plotted as ordinates in the mid-points of the respective intervals. The dotted parts of the curves represent optimistic prognostications.

Conclusions

Criticism of the Labor Relations act and its administration notwithstanding, the picture so obtained must be said to be a promising one.

First of all, the rapid increase during the last two years of the ratio C_p/S_{ob} shows that disputes over the outlawed unfair labor practices have indeed come to be settled to an impressively high degree through the NLRB rather than through strikes. Moreover, the decline during the last year of the ratio C_s/C_p, after a slight continued increase during the first three years, seems to indicate that labor is also coming to use the Board more truly in place of, and not merely as an auxiliary to strikes.

As regards strike trends, both S_{ob} and ${}_bS_o$ have declined after an initial increase; but so have strikes at large in the course of the terrific upsurge of industrial unrest during the spring and summer of 1937. Of considerable significance, however, seems the strongly diminished ratio $S_{ob}/{}_bS_o$, meaning that strikes in disputes under the Board's jurisdiction have declined

[20] The comparison ratio used by the NLRB for this purpose is $(C+R)/S$ and $(C+R)/S_o$, where R stands for the number of representation cases per year.

[21] A strangely incongruous measurement of employers' compliance has lately been used—namely, the ratio of complaint cases to all board cases, $C/(C+R)$. The decrease of this ratio from 81 per cent during the first year to 65 per cent during the last year has been interpreted as proof of growing employers' compliance. (Cited from unpublished study of the NLRB in the minority report of the special House committee investigating the National Labor Relations Board, House Rep. no. 1902, part 2, p. 44.) This ratio could, of course, decline even in the face of increasing non-compliance of employers if only intra-union strife, measured by R, were to increase sufficiently rapidly. (See footnote 7.)

[22] The complete records concerning complaint cases in the hands of the NLRB and concerning strikes in the hands of the Bureau of Labor Statistics would allow these indices to be calculated far more accurately.

Fiscal years	C	C_s	C_p	S	S_o	S_{ob}	${}_bS_o$	D	C_p/S_{ob}	C_s/C_p	$S_{ob}/{}_bS_o$
1935–36	(1,153)[23]	(96)	(1,057)	1,814	826	455	371	(1,512)	(2.3)	(0.1)	1.2
1936–37	3,124	446	2,678	3,513	1,877	1,092	785	3,770	2.5	0.2	1.4
1937–38	6,807	1,003[24]	5,804	2,870	1,574	738[24]	836	6,542	7.8	0.2	0.9
1938–39	4,618	405	4,213	1,971	1,122	466	656	4,679	9.0	0.1	0.7

C number of complaint cases filed with the NLRB per fiscal year (from the Board's annual reports).

C_s number of strike-complaint cases settled per fiscal year (*ibid.* The figures published by the NLRB do not give the number of strike-complaint cases among those *filed* per year, but only among those *settled* per year.)

$C_p = C - C_s$, number of pure complaint cases.

S number of all strikes begun during fiscal year (by summation from monthly strike analysis for respective years, *Monthly Labor Review*).

S_o number of organization strikes per fiscal year (*ibid.*).

S_{ob} number of organization strikes in disputes under Board's jurisdiction (obtained by subtracting from S_o (a) closed shop strikes, (b) strikes over violations of agreements (according to monthly strike analysis, *Monthly Labor Review*), (c) by deducting estimated number of strikes in intrastate industries. For want of better data the assumption is made that the ratio of strikes in intrastate industries to all industries was the same in 1936 as in 1937—namely, 33 per cent, and the same in 1939 as in 1938—namely, 39 per cent. (See footnote 15, *loc. cit.*)

${}_bS_o = S_o - S_{ob}$ number of organization strikes not under Board's jurisdiction.

$D = C_p + S_{ob}$, total number of disputes under Board's jurisdiction. The correction for the dismissed cases C_d has been omitted for lack of data. (See footnote 18.)

far more rapidly than organization strikes outside the Board's jurisdiction.[25] This result, rather than an even decline of all organization strikes, is really the one to be hoped for by the proponents of the Labor Relations act. For while disputes which are adjudicable by the Board should come to occasion even fewer strikes, no such hope need be entertained as regards organization strikes over issues not covered by any law. Such strikes may indeed be expected to decline definitely only if and when the principles of trade unionism cease to be controversial in the United States, that is, when employers will bargain with the representatives of the workers even where no law requires them to do so, when violations of agreements will, as a matter of course, be arbitrated rather than fought over, and when the issue

[23] The figures in parentheses are those referring to the first fiscal year. Since the first annual report of the Board covers only nine months (Oct. 1, 1935-June 30, 1936) the respective figures as given in the report have been multiplied by 4/3 to make them comparable to those for the three subsequent fiscal years of twelve months each.

[24] The figures for C_s and S_{ob} during the third year are seemingly contradictory, since the number of strike-complaint cases cannot be greater than that of all strikes in disputes under the oBard's jurisdiction. Aside from the uncertainty in S_{ob} due to the reduction for intrastate industries (see above, and footnote 15) this contradictory result might also arise from the fact that C_s, as reported by the Board, represents the number of strike-complaint cases *settled*, not *filed*, per year. The large number 1,003 for the third year may thus well include a substantial number of cases filed during the previous year.

[25] Accurate official data separating "organization strikes" into disputes adjudicable under labor relations acts (or their equivalent), and disputes not adjudicable under such acts

CHART I

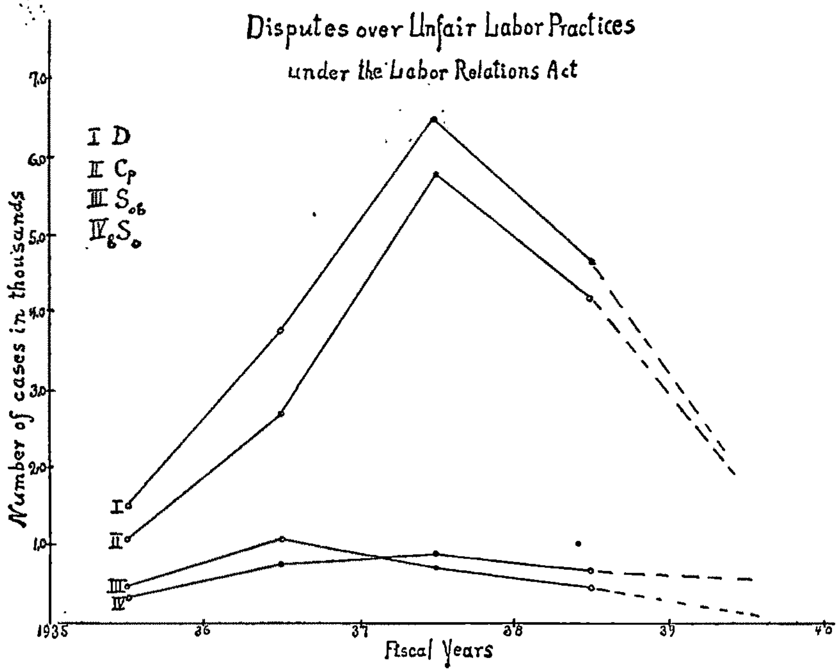
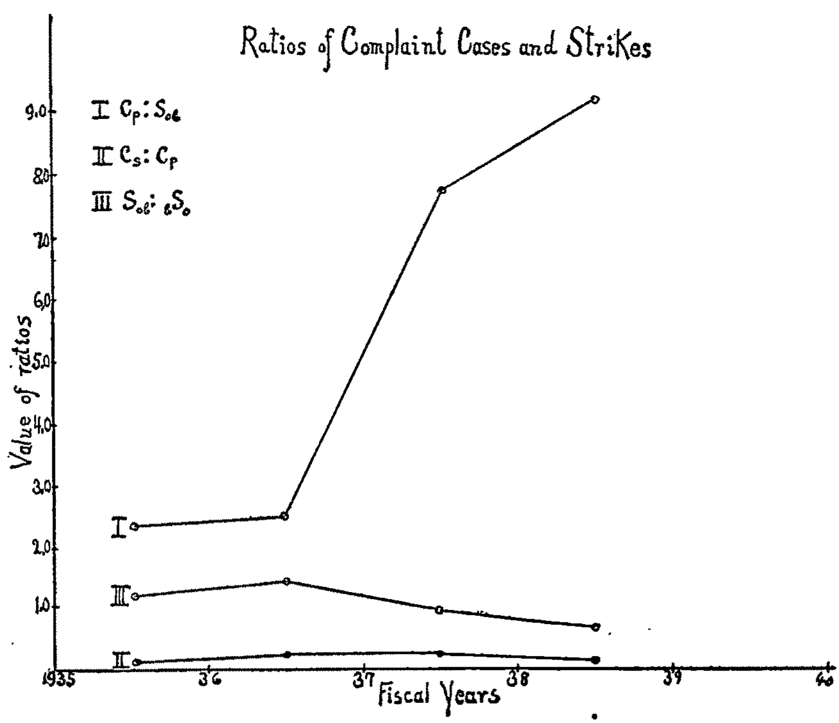


CHART II



of the closed shop will have been settled, one way or another, by law or social custom.[26]

Most remarkable, finally, seems the pronounced decrease in the total number of disputes D which has set in during the last year, following a steep increase during the first three years (a development which because of its lag in phase, and its increasingly large component of complaint cases cannot simply be regarded as part and parcel of the strike wave S). A strong initial increase in D was of course to be expected, partly because of the unavoidable "stirring up of industrial unrest" inherent in the governmental endorsement of labor's right to organize and bargain collectively, partly because of the initially uncertain constitutional standing and jurisdictional scope of the Act. If long continued, however, such increase or even levelling up of D would have betrayed unrelenting opposition to the Act on the part of the employers. The recent decline, therefore, seems a truly hopeful symptom of the acceptance by more and more employers of the principles of the Labor Relations act.

This decline in D, it should still be noticed, takes place at the expense not only of the strikes S_{ob}, but very largely also of the complaint cases C_p. Under these circumstances, however, the decline of the number of complaints over unfair labor practices submitted to the Board does not indicate a lessening of the effectiveness of the Board (although it may gradually mean fewer jobs on its staff), but the very contrary.[27] In fact only if the downward trend in D, and hence in C_p continues, can the Labor Relations act be claimed to be achieving the purpose for which it was created, that of helping to abolish strife over labor's right to organize and bargain collectively.[28]

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would do much to shed light on the much debated question of the effect of labor relations acts on strikes.

[26] *E.g.*, the Wisconsin Employment Peace act of 1939 (superseding the Labor Relations act of 1937) largely regulates the use of the "all-union agreement." (Wisconsin statutes ch. 111, sec. 111.06 1c.)

[27] The NLRB itself, seeking the proof for the effectiveness of the Labor Relations act chiefly in the increasing ratio of board cases to strikes, and not in the decline of the total number of disputes, had not commented unfavorably on the prolonged increase in D during the first three years, nor does it seem impressed with the recent decline in D. In fact it refers to this decline almost apologetically, saying that while the number of board cases had declined somewhat, the number of strikes had declined even more. (NLRB, *4. Ann. Rep.*, p. 2.) A different view of the symptomatic significance of the number of Board cases was recently expressed by Dr. William Leiserson, latest appointee to the NLRB, who declared that "he was looking forward with pleasure to the day when the Board will have little or no work to do because employers generally will be obeying the law." (Address before the Cooper Union Forum, New York, Dec. 5, 1939, reported in *New York Times*, Dec. 6, 1939.)

[28] We should like to point out that this article was prepared before the appearance of the *4. Ann. Rep.* of the NLRB. At that time the curves D and C_p were still climbing steeply. Our conclusion then had been that, the increasing ratio C_p/S_{ob} notwithstanding, the Labor Relations act could not yet be claimed to be a success because of the increasing total number of disputes.

ELASTICITY OF DEMAND COMPUTED FROM COST DATA

1. An individual producer striving toward maximum profit adjusts the volume of his output so as to equate marginal revenue to his marginal costs. Given the marginal costs $C'(q)$ of his output at any particular point of time and the price $p(q)$ at which it has been sold, the elasticity $\eta = \frac{p(q)}{q \cdot p'(q)}$ [1] of his "individual" demand curve $p(q)$ can be derived.

The marginal revenue equals the marginal costs:

$$(1)\ p'(q) \cdot q + p(q) = C'(q)$$

It follows that:

$$(2)\ \eta = \frac{p(q)}{q \cdot p'(q)} = \frac{p(q)}{C'(q) - p(q)}$$

2. The "Analysis of Steel Prices, Volume and Costs" prepared by the United States Steel Corporation in connection with its studies in preparation for the hearings on the steel industry before the Temporary National Economic Committee contains annual figures on the total revenue, output and marginal ("variable") costs of the Steel Corporation for a period of twelve years from 1927 to 1938.[2] Using these figures I present in the following table a computation of the corresponding elasticities of demand. Column 1 gives the total revenue (Net Sales + Transportation and Miscellaneous Revenues); Column 2, the volumes of output for each year.[3] Dividing the first by the second, the unit prices, $p(q)$, of the product are obtained. These are entered in Column 3.

The marginal costs were found to be "constant," *i.e.*, independent of the volume of output. Adjusted to the price and productivity level of various factors as of 1938 they are shown to be $55.75 per ton. For our elasticity computation we need, however, not the "adjusted" but the actual marginal costs. In other words, the figure of $55.75 has to be readjusted to the factor prices and productivity levels of each of the previous years. The *Report* supplies us with the actual (Table 5 of the *Report*) and "adjusted" (Table 17 of the *Report*) total cost figures for each year. The relation of the two shows the ratio of the actual and adjusted factor-prices and productivity levels. Multiplying thus $55.75 by $\frac{\text{Actual Cost of the Given Year}}{\text{Final Adjusted Costs of the Given Year}}$,

[1] The usual mathematical definition of the elasticity of demand is $\frac{-dq}{dp}\frac{p}{q}$. Omitting the minus sign and substituting $\frac{1}{p'(q)}$ for $\frac{dq}{dp}$, we obtain the expression used above.

[2] Exhibit No. 1416 in the records of the Temporary National Economic Committee. Reprinted in *United States Steel Corporation T. N. E. C. Papers* published by the United States Steel Corporation, 1940.

[3] *Op. cit.*, Table 30.

we obtain the actual marginal costs of that particular year, C'. These are entered in Column 4. Column 5 contains the final results—the elasticities of demand for the product of the United States Steel Corporation.

3. In reading these figures it is necessary to keep in mind that each represents the elasticity *at one particular point of the demand curve of one particular year.* $\eta = -3.56$ is related for example to the demand curve which the Steel Corporation faced in the year 1928, and it shows the

	1	2	3	4	5
	$p(q) \cdot q$ (Millions of dollars)	q (Millions of tons)	$p(q)$ (Dollars)	$c'(q)$ (Dollars)	η
1927	947	13.0	72.8	50.6	−3.28
1928	992	14.0	70.9	51.0	−3.56
1929	1,068	15.1	70.7	50.1	−3.43
1930	814	11.9	68.4	48.1	−3.37
1931	524	8.1	64.7	47.7	−3.82
1932	283	4.4	64.3	46.1	−3.53
1933	370	6.2	59.7	45.0	−4.06
1934	419	6.1	68.7	48.3	−3.39
1935	540	7.6	71.1	49.2	−3.25
1936	792	11.0	72.0	49.9	−3.26
1937	1,022	13.2	77.4	54.7	−3.41
1938	606	7.8	77.7	55.7	−3.53

elasticity of this curve at the point at which the price equals $70.9 and the corresponding quantity demanded (and supplied) equals 14.0 million tons.

In the year 1929 the demand curve might have entirely changed its shape, but in any case it passed through the point $p(q) = 70.7$, $q = 15.1$ and our computation shows that at that point it had the elasticity of −3.43.

4. In the present note I do not make an attempt to reconstruct from the given point elasticities a complete "full length" demand curve. Such an attempt would require special assumptions concerning its general shape (straight line, parabola or hyperbola?) and the nature of its shifts (parallel up and down, parallel to the left and to the right, proportional?) from year to year.

To be sure, assumptions of this kind explicitly or implicitly are involved in any and every method of statistical derivation of two dimensional "full length" demand curves. The elasticity computation presented above is obviously not burdened by any assumption of this type.

5. The values listed in the last column of our table are considerably larger (in numerical magnitude, disregarding the negative signs) than the average elasticity figure arrived at in the "Analysis of Steel Prices. . . ." According to that *Report* "taking into account all factors and making a

liberal allowance for possible error, the elasticity of demand for steel is not in excess of 0.2 or 0.3 (or taking in account the negative sign, "not below —0.2 or —0.3").[4]

This discrepancy is in the first instance due to the fact that my figures are supposed to represent the demand curve for the output of the Steel Corporation, while the curve derived in the *Report* is related to the market demand, *i.e.*, the total demand for the aggregate steel output of all producers. The first type of demand can be expected to be more elastic than the last.

6. The presented elasticity figures obviously stand and fall with the basic theoretical relationship described by formula (1). If the marginal revenue deviates from the marginal costs, the computed elasticity will also deviate from its true value.

Three cases of such deviation can be conveniently distinguished.

If the marginal revenue exceeds the marginal costs,

(3) $p'(q)\cdot q + p(q) > C'(q)$, then

(4) $p'(q)\cdot q > C'(q) - p(q)$

Both sides of this inequality are negative (because $p'(q) < O$ and $q > O$). Thus,

$$(5)\ \eta = \frac{p(q)}{p'(q)\cdot q} < \frac{p(q)}{C'(q) - p(q)}$$

If the marginal revenue is smaller than the marginal costs,

(6) $p'(q)\cdot q + p(q) < C'(q)$, then

(7) $p'(q)\cdot q < C'(q) - p(q)$.

Essentially $p'(q)q$ is negative, but the right-hand expression will be negative or positive depending upon the comparative magnitude of the marginal costs and the price.[5]

If, as can be reasonably assumed,

(8) $C'(q) < p(q)$, then

$$(9)\ \eta = \frac{p(q)}{q\cdot p'(q)} > \frac{p(q)}{C'(q) - p(q)}.$$

These considerations apply also in the special case in which the demand curve is supposed to have a "kink" exactly at the equilibrium point, *i.e.*, a case in which the marginal revenue in the "downward direction" is smaller while in the "upward direction" it is larger than the marginal costs.

[4] *Op. cit.*, p. 37 of the pamphlet, p. 267 of the volume reprinted by the Corporation.

[5] (10) If $C'(q) > p(q)$, which is a rather exceptional situation,

$$(11)\ \eta = \frac{p(q)}{q\cdot p'(q)} < \frac{p(q)}{C'(q) - p(q)}.$$

The latter inequality is practically useless because the right-hand side of it is positive, while from general considerations it already follows that $\eta < O$.

7. The application of the proposed indirect method of elasticity computation is subject to various limitations. The assumed equality of marginal revenue and marginal costs ignores the existence of speculative considerations, *i.e.,* the possible influence of the present prices upon future demand.

If, as a result of such complications, the marginal revenue exceeds the marginal costs, formula (5) can still be used to determine the upper limit of the actual demand elasticity. If the marginal revenue of the Steel Corporation is greater than its marginal costs, the computed elasticity values are (numerically) smaller than the actual—the real elasticity might be —4.5, —5.0 or even greater.

On the other hand, the indirect method of computation has the advantage of being able to get at the actual demand curve of the particular enterprise in all its subjective complexity. Under oligopolistic conditions, such as prevail on the American steel market, the opinion of the particular producer about the possible reactions of his actual or potential competitors (the so-called conjunctural elements) plays an important part in determination of the shape of his individual demand curve. Barring the uncertain device of personal questionnaires, the indirect method of demand analysis described above represents the only possible way of measuring these highly volatile demand relationships.

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DISTRIBUTION OF PROPERTY IN TWO CALIFORNIA COUNTIES, 1907 AND 1935, BASED ON PROBATE RECORDS

The two counties considered here are urban in character. Data obtained indicate distribution of individual property holdings, not wealth distribution. Since (1) nominal estates are not probated, (2) some more than nominal estates wholly or partly escape probate, and (3) not all probated estates are inventoried, data presented actually constitute a sample of the distribution of probated estates derived from those inventoried. Property distribution among all adults dying is not shown, since the exact number and the average value of nominal estates cannot be ascertained. The pattern of distribution is similar to that found in other studies. San Francisco shows a higher concentration of property than Alameda County. The two counties, separately and combined, display a higher concentration of property in 1935 than in 1907.

This study of property distribution, based on probate data, is confined to the wholly urban county of San Francisco and the essentially urban county of Alameda in California. The bulk of the population of the two counties is concentrated in a metropolitan area consisting of the city of San Francisco, and a number of lesser cities across San Francisco Bay, including Oakland, Berkeley, Alameda, Piedmont, and Emeryville. Total population of the two counties was approximately 600,000 in 1907 and 1,300,000 in 1935. These were the earliest and latest years in which reasonably adequate probate data could be obtained.[1]

In the tables below, estates of males and females were not separated as was done in King's early study,[2] since such a separation seemed of doubtful value. To an increasing extent women as well as men have estates, and it seemed likely that this would be especially true of urban communities. The ages 21 and over were selected instead of 25 and over as in King's study cited above, because of the greater inclusiveness.[3]

A probate study of this kind shows distribution of individual rather than family estates. Only that part of the total family estate which is legally the property of the deceased is subject to probate. Moreover, even this individual distribution is shown only incompletely, since estates of nominal size are not probated, and since all or part of the individual estate of the deceased may not be subject to probate, because of the manner in which it is held.[4] Finally, even the statistics of estates actually probated are incomplete, because some estates probated are not inventoried. Thus the data obtained for purposes of finding the property distribution represent fundamentally merely a large sample of those estates of persons dying which were actually probated.

[1] Earthquake and fire destroyed records for years previous to 1906 in San Francisco. The study was undertaken and completed in 1937.

[2] W. I. King, *Wealth and Income of the People of the United States*, 1915, ch. 1.

[3] The age 21 was used also by the Federal Trade Commission in its survey for 1912-1923. Federal Trade Commission, *National Wealth and Income*, Senate Doc. no. 126, 1926, p. 58.

[4] In practice in California property deeded before death, trusts, joint tenancies, communities of interest, and life insurance payable to another are wholly or partly exempt from probate.

TABLE I—DISTRIBUTION OF ESTATES IN SAN FRANCISCO AND ALAMEDA COUNTIES FOR 1907, AS SHOWN BY INVENTORIES IN THE PROBATE RECORDS OF PERSONS 21 OR OVER DYING IN THAT YEAR

Value of inventoried estates	San Francisco County				Alameda County				Both Counties			
	1	2	3	4	5	6	7	8	9	10	11	12
	Number of inventoried estates	Per cent of total number of inventoried estates	Total value of inventoried estates (thousands)	Per cent of total value of inventoried estates	Number of inventoried estates	Per cent of total number of inventoried estates	Total value of inventoried estates (thousands)	Per cent of total value of inventoried estates	Number of inventoried estates	Per cent of total number of inventoried estates	Total value of inventoried estates (thousands)	Per cent of total value of inventoried estates
Under $ 500	148	11.5	$ 35.4	0.2	67	11.8	$ 18.9	0.3	215	11.6	$ 54.3	0.2
$ 500– 1,000	152	11.8	108.3	0.5	61	10.8	44.7	0.8	213	11.5	153.0	0.5
1,000– 2,500	282	22.0	445.3	1.9	124	21.9	196.7	3.3	406	21.9	642.0	2.2
2,500– 5,000	224	17.5	788.9	3.4	104	18.3	364.5	6.1	328	17.7	1,153.4	4.0
5,000– 10,000	182	14.2	1,308.7	5.6	96	16.9	685.8	11.6	278	15.0	1,994.5	6.9
10,000– 25,000	148	11.5	2,378.6	10.3	69	12.2	1,025.7	17.3	217	11.7	3,404.3	11.7
25,000– 50,000	67	5.2	2,303.6	9.9	19	3.3	676.6	11.4	86	4.7	2,980.2	10.2
50,000– 100,000	44	3.4	2,974.4	12.9	23	4.1	1,552.5	26.2	67	3.6	4,526.9	15.6
100,000– 250,000	22	1.7	3,525.0	15.2	3	0.5	548.7	9.2	25	1.4	4,073.7	14.0
250,000– 500,000	12	0.9	4,556.4	19.7	0	0.0	0.0	0.0	12	0.7	4,556.4	15.7
500,000– 1,000,000	1	0.1	592.3	2.6	1	0.2	820.5	13.8	2	0.1	1,412.8	4.9
1,000,000 and over	2	0.2	4,112.1	17.8	0	0.0	0.0	0.0	2	0.1	4,112.1	14.1
Number of estates inventoried	1,284	100.0	23,129.0	100.0	567	100.0	5,934.6	100.0	1,851	100.0	29,063.6	100.0
Number not inventoried	645				109				754			
Number probated	1,929				676				2,605			
Number not probated	3,035				2,027				5,062			
Number of persons (21 and over) dying, *i.e.*, total number of estates	4,964				2,703				7,667			
Mean			18,013				10,467				15,702	
Median			2,935.5				3,000				2,975	

Table II—Distribution of Estates in San Francisco and Alameda Counties for 1935, as Shown by Inventories in the Probate Records of Persons 21 or Over Dying in That Year

Value of inventoried estates	San Francisco County				Alameda County				Both Counties			
	1	2	3	4	5	6	7	8	9	10	11	12
	Number of inventoried estates	Per cent of total number of inventoried estates	Total value of inventoried estates (thousands)	Per cent of total value of inventoried estates	Number of inventoried estates	Per cent of total number of inventoried estates	Total value of inventoried estates (thousands)	Per cent of total value of inventoried estates	Number of inventoried estates	Per cent of total number of inventoried estates	Total value of inventoried estates (thousands)	Per cent of total value of inventoried estates
Under $ 500	115	6.7	$ 31.9	0.1	71	5.6	$ 17.4	0.0[1]	186	6.2	$ 49.3	0.1
$ 500– 1,000	126	7.3	90.4	0.2	126	9.9	87.2	0.5	252	8.4	177.6	0.3
1,000– 2,500	337	19.5	573.9	1.6	348	27.4	584.5	3.6	685	22.9	1,158.4	2.2
2,500– 5,000	367	21.3	1,309.8	3.6	247	19.5	882.2	5.4	614	20.5	2,192.0	4.1
5,000– 10,000	324	18.8	2,280.9	6.2	199	15.7	1,395.5	8.6	523	17.5	3,676.4	6.9
10,000– 25,000	233	13.5	3,540.6	9.6	160	12.6	2,523.3	15.5	393	13.1	6,063.9	11.4
25,000– 50,000	101	5.9	3,511.2	9.5	57	4.5	2,012.6	12.4	158	5.3	5,523.8	10.4
50,000– 100,000	60	3.5	4,214.0	11.4	33	2.6	2,297.5	14.1	93	3.1	6,511.5	12.3
100,000– 250,000	37	2.1	5,268.2	14.3	20	1.6	2,897.4	17.8	57	1.9	8,165.6	15.4
250,000– 500,000	12	0.7	4,059.3	11.0	5	0.4	1,906.8	11.7	17	0.6	5,966.1	11.2
500,000– 1,000,000	7	0.4	4,811.0	13.0	1	0.1	584.1	3.6	8	0.3	5,395.1	10.1
1,000,000 and over	6	0.3	7,176.6	19.5	1	0.1	1,106.5	6.8	7	0.2	8,283.1	15.6
Number of estates inventoried	1,725	100.0	36,867.8	100.0	1,268	100.0	16,295.0	100.0	2,993	100.0	53,162.8	100.0
Number not inventoried	480				623				1,103			
Number probated	2,205				1,891				4,096			
Number not probated	5,855				3,419				9,274			
Number of persons (21 and over) dying, *i.e.*, total number of estates	8,060				5,310				13,370			
Mean			21,373				12,851				17,762	
Median			4,220				3,211				3,780	

[1] Less than 0.1 per cent.

Any attempt to estimate the distribution of property ownership among all adults dying in a given period must necessarily be based partly on guesswork. The number of nominal estates cannot be determined exactly, because some estates of more than nominal size are held or transferred in such a way as to escape probate; and, moreover, the total and average value of nominal estates is not known.[5] It is of course obvious that any distribution of probated estates arrived at, and any estimates attempted of the distribution of property among all deceased persons, merely indicate property distribution among living persons, for an exact correspondence of holdings may not be properly assumed. The study does not purport to be an analysis of the distribution of wealth, or even a basis on which the wealth of the region covered may be accurately calculated.[6] Tables below, which summarize the findings, indicate the distribution of property among probated estates which were inventoried.

Class intervals used are the same as those employed by the Federal Trade Commission. The estimated total number of estates, the numbers inventoried and not inventoried, and the numbers probated and not probated are given at the bottom of the tables. The mean and median values of inventoried estates are also given for purposes of comparison with other studies, but not because they are regarded as highly significant.

The tables permit comparison county by county and of the two counties combined for two periods nearly thirty years apart. The estimated number of deceased persons in 1907 was based on local and federal death figures and on direct examination of death certificates. This latter source of data was not required for 1935. The proportion of estates probated to the total number of persons who died was higher in both years than the ratio found in the Federal Trade Commission investigation where 76.5 per cent were not probated.[7] The ratio of inventoried estates to total probated was also high in comparison to King's Massachusetts data.[8]

A general pattern of distribution similar to that found in other studies is at once evident. A greater concentration of property in estates above \$100,000 and a larger proportion of the total number of inventoried estates concentrated in estates valued at less than \$5,000 is shown as compared with the Wright and Johnson data for two rural Minnesota counties in 1923.[9] Hall's study of six rural and urban counties in Washington for the years 1928, 1933, and 1935 also shows less concentration of property values in estates above \$100,000.[10] The combined distribution for

[5] Both King and the Federal Trade Commission guessed at these values of nominal estates.

[6] *Cf.* R. R. Doane, *The Measurement of American Wealth,* 1933, pp 8-9.

[7] The Commission estimated that during the period covered by its investigation 184,958 adults died. The estates of only 43,512 were probated. *Op. cit.*

[8] *Op. cit.,* p. 2.

[9] See F. B. Garver and A. H. Hansen, *Principles of Economics,* 1937, pp. 546-547.

[10] James K. Hall, *A Study of Probated Estates in Washington with Reference to the State Tax System,* Univ. of Wash. pub., vol. 11, no. 1, 1939, pp. 31-32.

COMMUNICATIONS

Further Comment on "Offset Checks"

The issue between Messrs. Dice and Schaffner and me concerns the definition of a deposit balance.[1] Messrs. Dice and Schaffner have defined a deposit balance as "the net credit balance existing within a bank account at any given time."[2] I have defined a deposit balance as the right to draw a check. The issue between us arose over the way in which operations within a posting period are to be described. Let us assume that A and B each have a deposit balance after a given posting of $1.00, that both balances are in the same bank, and that checks are posted at the end of each day. One morning A gives B a check for $.50 which B deposits immediately. What are A's and B's deposit balances at noon? I should say that A's deposit balance was $.50 and B's balance was $1.50; but Messrs. Dice and Schaffner would say, despite *their* definition of a deposit as "the net credit balance . . . *at any given time,*" that A's deposit balance was $1.00 plus an accumulating debit of $.50 while B's balance was $1.00 plus an accumulating credit of $.50. Let us further assume that during the afternoon of the same day B gives A a check for $1.50 which A also deposits at once. After this transaction but before the posting took place at the end of the day, I should say that A's balance was $2.00 and B's balance was $0; but Messrs. Dice and Schaffner would say that A's balance was still $1.00 plus an accumulating crdeit amounting to $1.50 and an accumulating debit amounting to $.50 and B's balance was still $1.00 plus an accumulating credit of $.50 and an accumulating debit of $1.50.

After the posting we should both agree that A's balance was $2.00 and B's balance was $0, but we should describe what had happened quite differently. Messrs. Dice and Schaffner would say that A's account (credit of $1.50 and debit of $.50) had no velocity but had "offset checks" amounting to $.50, while I should say that the account had a velocity of 1/2. Messrs. Dice and Schaffner would say that B's account (credit of $.50 and debit of $1.50) had a velocity of 1 and "offset checks" amounting to $.50, while I should say that the account had a velocity of 3/2. In other words, I use velocity as total debits ($2.00) *over a period* divided by deposit balances ($2.00) *at some instant,*[3] while Messrs. Dice and Schaffner must be defining velocity as total debits ($2.00) minus credits, in full when such credits are less than debits (in this case B's account and a deduction from debits of $.50) and up to the amount of debits when credits are larger than debits (in this case A's account and a deduction from debits of $.50), divided by deposit balances ($2.00). More simply, Messrs. Dice and Schaffner define velocity as the excess of debits over credits[4] to in-

[1] Dice and Schaffner, "A Neglected Component of the Money Supply," this *Review,* Sept., 1939, pp. 514-20; Villard, "A Note on Offset Checks as a Component of the Money Supply," Dec., 1939, pp. 798-9; and Dice and Schaffner, "A Reply to Mr. Villard," March, 1940, p. 113.

[2] This *Review,* March, 1940, p. 113.

[3] An *average* of balances held at different *instants* may also be used, but this refinement is rarely important for the economy as a whole. Stress is laid on balances *at some instant* to insure that a given balance is not owned by more than one person (and so counted twice), as is the case if the *sum* of balances held *over a period* were used instead of balances held at some instant. *Cf.* below.

[4] For the economy as a whole, of course, debits would be the same as credits *if,* as assumed in the example used, all checks drawn in a period cleared simultaneously at the end of the period. Given simultaneous clearing, it follows from Messrs. Dice and Schaffner's

dividual accounts at a given posting divided by deposit balances, while "offset checks" are the sum of either credits or debits to individual accounts *whichever are smaller.*

Note that Messrs. Dice and Schaffner confine debits and hence velocity to the checks drawn against the specific balances made available by the last posting, which of course means that the velocity of an individual account can never be more than one, no matter how long the period between postings. Given their definition of deposit balances, debits, and velocity, it follows that debits in excess of one, which usually will be matched by equal credits, must be said to result from checks drawn not against deposit balances (in the sense of those made available by the last posting), but against check receipts, which Messrs. Dice and Schaffner must insist are independent of the form of money known as deposit balances and a distinct form of money. Hence it follows from their usage that checks drawn against check receipts are not drawn against deposits and do not transfer deposits.

But if we mean by deposit balances the right to draw checks and by debits all checks which have in fact been drawn against deposit balances over a period of time—whether such balances were made available to the drawer by the last posting or by checks received since the last posting—velocity can be in excess of one,[5] checks are always paid out of deposit balances (but not necessarily out of those made available by the last posting), and checks always do transfer deposits (but not necessarily those made available by the last posting).

My first note apparently did not make it clear that I meant the denominator of the velocity ratio to be the check-writing ability of depositors *as of some moment of time,* as Professor Eiteman suggests that I may have meant "the accumulated sum of credit balances which may have had a momentary existence," by which I feel sure Professor Eiteman means the check-writing ability of depositors *over a period of time.*[6] My stress on check-writing ability was to insure the inclusion in the numerator of all debits—not simply debits in excess of credits—and was never intended to change the denominator of the velocity ratio.[7]

If I have made clear the different terminologies used by Messrs. Dice and Schaffner and me, I shall leave to others the decision as to which terminology is more useful, except to stress that the differences between us, as well as the meaning of Messrs. Dice and Schaffner's terms, are in the main a function of the length of the posting period. If postings were instantaneous, our terminologies would be identical; in other words, "offset checks" would be zero and their meaning of velocity would be the same as mine. On the other hand, for balances of a given size the longer the posting period the larger "offset checks" will be relative to velocity (in their sense), quite apart from any change whatsoever in the payment practices of the people owning the balances.[8] Thus the distinction

usage that deposits as a whole *never* have velocity, as total debits can *never* be in excess of total credits.

[5] Thus in the example used, B has drawn a check in excess of his "net credit balance" at the start of the period, as half the original deposit balance of A has been transferred to B and then back again to A—*i.e.,* has had two debits against it in a given posting period.

[6] "Comment on 'Offset Checks as a Component of the Money Supply' by Mr. Villard," this *Review,* March, 1940, pp. 114-5. The quotation is from p. 114.

[7] Only if an attempt were made to calculate velocity on the basis of deposit balances (in my sense) existing between postings would Messrs. Dice and Schaffner and I disagree as to the denominator of the velocity ratio.

[8] In addition, for posting periods of any given length the larger the size of the balance the

of Messrs. Dice and Schaffner does not necessarily cast light on anything in the real world except bank posting practices,[9] although I suspect that Messrs. Dice and Schaffner think that their distinction does far more than this. But I can see neither a general way of calculating "offset checks" nor a reason for attempting the calculation, as I know of no important reason to distinguish between velocity (in my sense) within an account and between accounts, which depends, as we have seen, mainly on the length of the posting period.

HENRY H. VILLARD

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Offset Checks: Further Reply

In his first discussion[1] of our article "A Neglected Component of the Money Supply" published in the *Review* in September, 1939, Mr. Villard contended that we were defining deposit balances in an unusual manner. In his second discussion appearing on another page of this issue he attempts to make the point that we are using the concept "velocity" in an unusual manner. The authors feel that a brief restatement of their analysis of the intra-account clearing process may serve as the best answer to Mr. Villard.

Anyone familiar with the activity that occurs in the bank account of a going business concern is aware of the fact that a sizeable portion of the daily debits charged to the account is matched at the time of bank posting by simultaneous credit entries. In a recent investigation the authors sampled the accounts of business firms in one of the leading banks in Ohio.[2] The daily debit and credit data over a 27-month period in 15 commercial firms' accounts showed that 55 per cent of the checks drawn during the period were offset at the times of bank postings by simultaneous credit entries. The percentage was 65 in a sample of 14 industrial firms' accounts over the same period. The question then arose, "Can these offset checks be fairly regarded as representing transfers of deposit balances?"

If a deposit balance is defined as the net credit balance existing at any time in the account of a bank customer, it follows that credit entries to a bank account which are simultaneously matched by debit entries at the time of bank posting never have the chance to appear as net credit balances and, therefore, cannot be regarded as deposit balances. The fact remains, however, that the holder of the account has drawn checks in payment of his obligations. Against what have the checks been drawn? Not against deposit *balances* as defined above, but

larger "offset checks" will be relative to Dice and Schaffner velocity, other things equal. For the economy as a whole "offset checks" equal all debits (or credits) and velocity is zero. See note 4 above.

[9] If it were found that checks were completely "offset" in a given account, it could be argued that this fact had demonstrated that the balance in question was not being held for transaction purposes (although even this conclusion would not follow if banks were requiring minimum balances). But complete "offsetting" of checks means simply that the balance involved does not vary from posting to posting, and the mere existence of a balance which does not fluctuate raises the question of why such a balance is being held, quite apart from elaborate computations regarding "offset checks."

[1] H. H. Villard, "A Note on Offset Checks as a Component of the Money Supply," this *Review*, Dec., 1939, pp. 798-799.

[2] The authors are indebted to the Bureau of Business Research of Ohio State University for aid in this investigation.

against check receipts. The process whereby debits and credits representing check payments and receipts are offset at the times of bank postings has been called by the authors "intra-account" clearing. The result of this process, as viewed by the authors, is to make checks cleared against check receipts entirely independent of the form of money known as deposit balances. In other words, checks thus cleared become a distinct form of money.

Our approach emphasizes the receipts and expenditures of individuals and business firms. By means of bank accounts the banking system integrates the private books of various individuals and firms, and thereby provides a basis for widespread clearing of receipts and expenditures. For credit to its bank account a firm will send checks against which other checks are drawn. Only if credits (including bank loan proceeds) exceed the debits to an account does a deposit balance arise. In other words, deposit balances as reported in bank statements are net balances remaining after the intra-account clearing process.

What are the implications of this process for what is called "transactions velocity" of deposit balances? In the first place, the authors feel that this concept is a crude tool of analysis. There has been increasing emphasis in monetary literature in recent years on the different purposes for which deposit balances are held—an emphasis which we feel is strongly justified in the interest of realistic monetary analysis. In our minds the concept of transactions velocity helps to obscure the fact that deposit balances are not a homogeneous factor. Velocity theorists compute an omnibus velocity figure as a generalized measure of the rate at which deposit balances are being used for all kinds of purposes. Such computations do not contribute to a refined body of monetary analysis.

In the second place, the process of intra-account clearing injects a qualitative inconsistency into the concept of transactions velocity. The transactions velocity ratio is computed on the assumption that the entire volume of checks drawn in a certain period represents *transfers* of deposit *balances*. But if a check which is credited to a bank account is simultaneously offset by a check debited to the account, the first check—as we have indicated—never becomes a deposit balance in the account to which it is credited. Therefore, the second check representing a payment by the holder of the account cannot be considered as paid out of a deposit balance. If the amount of checks drawn against an account and not matched by simultaneous credit entries at the times of bank postings were known, the ratio of this amount to the average deposit balance in the account over a given period would provide a measure—albeit a crude one, as we have indicated in the preceding paragraph—of the use of the deposit balance as a means of payment. To use total checks drawn as the numerator of the velocity ratio, however, gives a very erroneous impression of the activity of deposit balances. Such a ratio has about as little significance as a ratio of currency in circulation to average deposit balances.[3] In both cases the component parts of the ratios perform largely different types of monetary work and react in different degrees to marked changes in economic activity.

Deposit balances are likely to be held to a large extent for liquidity or precautionary purposes, rather than for current payment purposes. In other words, deposit balances in their bearer-of-options store of value and hedging functions are apt to be more important than in their medium-of-exchange function. If this position is correct—and our research on the intra-account clearing process would seem to confirm it—it may be of greater importance for monetary theory to delve into the various purposes for which deposit balances are held as bearers of

[3] J. W. Angell, *The Behavior of Money* (New York, 1936), p. 59.

options and hedges than to analyze them merely as adjuncts to different types of money outlays.

Clearing is the appropriate means of settling debts to the extent that economic activity within firms is continuous and that such activity among firms is simultaneous. The authors feel that recognition of and emphasis on the process of intra-account clearing helps to keep these important characteristics of our economic system more firmly in mind than does the treatment of our monetary transactions in terms of a turnover of balances.

Our interest is a wider one than is involved in the matter of velocity. We are interested in a realistic analysis of the banking process and its relation to the income and outlay of business units. We are also interested in the broad point of view involved in such an analysis. As we see it, this broad point of view provides a new insight into such concepts as the supply of money, the value of the monetary unit, price control, and various other monetary problems.

CHARLES A. DICE
PHILIP SCHAFFNER

Ohio State University

Pacific Gas and Electric Case: Reply

Two comments—one by Professor Bigham and one by Professor Mayer—appear in the June issue of the *Review*, questioning a suggested interpretation of the opinion of the Supreme Court in the Pacific Gas and Electric Case, 302 U. S. 388 (1938). The interpretation is found in an article in the December, 1939, issue of the *Review*.

Professor Mayer's comment indicates on its face misunderstanding of the interpretation he challenges. After quoting from the article to the effect that "if the reasoning in this case (Pacific Gas and Electric) is consistently followed, there will be few, if any, occasions on which a rate order based upon historical cost will be distributed by the Supreme Court," Mr. Mayer proceeds to state that "if, in the future, complaining public utilities plead the confiscation issue directly, the *courts* will find nothing in the Pacific Gas and Electric decision to preclude their accepting and weighing reproduction cost evidence although that evidence may have been rejected by the Commission. Consequently, it is entirely possible that many rate orders based on historical cost may be disturbed by the *courts* without doing violence to this decision."

It is quite apparent that the sentences quoted from our article deal exclusively with the attitude of the Supreme Court toward historical cost. There is no suggestion in this quotation or in the whole article that the decision of the Supreme Court precludes trial courts from "accepting and weighing reproduction cost," when confiscation is the issue.

If the decision precluded the consideration of reproduction cost by trial courts the statement that "there will be few, if any, occasions on which a rate order based upon historical cost will be disturbed by the Supreme Court" would be meaningless. If such courts were compelled by the Supreme Court to follow historical cost alone, then the Supreme Court would *never* disturb a rate order because it was based on such cost.

The interpretation suggested in our article can perhaps be best illustrated by supposing that a trial court in a case where confiscation is the issue sustains a Commission order made on the basis of historical cost such as the order involved in the Pacific Gas and Electric case, and further that the court refuses to give

consideration to any factor but historical cost, as the California Commission refused to do. The question raised in our article then would become relevant. Would the *Supreme Court* disturb such an order? We believe it would in very few cases, if any. We believe that the Supreme Court would find, in most instances, some reason for upholding the rejection of reproduction cost and would support the order. In our article we did not say less than this, or mean more.

Professor Bingham's comment raises several issues all of which cannot be dealt with summarily.

To begin with, he makes no reference to the Chesapeake and Potomac Telephone case, 295 U. S. 662 (1935) and yet it is impossible to appreciate the decision in the Pacific Gas and Electric case without giving careful consideration to the opinion in the telephone case, since the court below in the Pacific Gas case rested its opinion squarely on the Supreme Court's decision in the telephone case.

The point involved in the latter case was also procedural. The Supreme Court found that the application of a general price index by the Maryland Commission in determining fair value constituted a denial of due process and held the Commission's order invalid although no finding of confiscation was made. This was rather surprising as there is much in the Supreme Court's opinion in the earlier case of Los Angeles Gas and Electric Corporation *versus* Railroad Commission of California, 302 U. S. 287 (1933) leading to the conclusion that no rate order of a state commission would be invalidated by the federal courts unless it was shown to be confiscatory. In the Pacific Gas case the California Commission stated that in its entire history it has determined the rate base by use of historical cost, refused to give consideration to reproduction cost evidence and found the rate base to be equal to historical cost. Yet the Supreme Court found no denial of due process.

The use of historical cost then has been held to be no denial of due process while the use of a general price index has been held denial of due process. Furthermore, in the Los Angeles case where confiscation was the issue the Supreme Court went to great lengths in reconciling historical cost estimates with fair value. Do not all these opinions, when their effect is considered cumulatively, justify the conclusion "that a majority of the Supreme Court now look with favor upon the use of historical cost as the rate base"?

It seems to us that from a realistic viewpoint the legal distinction between denial of due process and confiscation has been exaggerated in interpreting these decisions. Professor Bigham's views in this connection may be summarized as follows: So far as due process requirements are concerned, they can be satisfied by merely examining reproduction cost evidence with care, and such evidence if found to be without force may be excluded in fixing the rate base. In a confiscation case, however, according to Professor Bigham, this is not sufficient; reproduction cost evidence must, if "substantial," receive weight in fixing the base. (The O'Fallon decision is cited as authority for this, but it is debatable as to whether or not that decision is applicable to a case involving the validity of the order of a state commission and it is by no means clear that confiscation was the real issue in the case.) So far as due process is concerned we are in agreement with Professor Bigham. When it comes to confiscation, however, we think that a majority of the present Supreme Court will be alert to find reasons for not disturbing rate orders established by commissions and sustained by trial courts when such commissions and courts give little or no weight to reproduction cost evidence. In other words, we believe that the Supreme Court will either be quick to conclude

that such evidence is not "substantial," or to find compensatory factors for the elimination of reproduction cost in determining the rate base. This conclusion, we submit, is amply supported by a realistic interpretation of the recent decisions of the Supreme Court of the United States.

G. LLOYD WILSON
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The Possibility of a Positively Sloped Demand Curve for Labor

In a recent article[1] Mr. Sidney C. Sufrin examines the possibility of an increase in output and employment for a monopolistic firm resulting from a rise in wage rates, assuming no change in the demand curve for the product. Mr. Sufrin's conclusions are based upon the examination of a hypothetical case but it is necessary to determine the exact conditions under which the above situation is possible before valid conclusions of sufficient generality can be drawn. The possibility of a positively sloped short-run demand curve for labor in periods of deep depression has also been suggested by Mr. R. F. Harrod.[2] But as will be shown, the case of a positively sloped demand curve for labor need not be limited to those situations where plants are operating in a stage of decreasing cost.

Assuming the demand curve for labor to a firm selling in an imperfect market to be given by the product of marginal physical productivity and marginal revenue, corresponding to each number of laborers employed, there are three conceivable situations for which this curve may be positively sloped. The most obvious case would be one in which both the marginal physical productivity curve and the marginal revenue curve were positively sloped. Such a situation is probably not likely, however. A second possibility would be one in which the marginal physical productivity curve is positively sloped and the marginal curve is negatively sloped, provided of course that the demand for the product is not inelastic. This case will hold true within certain limits defined below. A rising marginal physical productivity curve might occur when a plant is operating far below optimum capacity so that each additional worker employed together with the appropriate amounts of raw materials would yield increasingly larger increments to the total product. An example of this situation might be a case where the employment of additional laborers would permit the use of machines which had previously stood idle in the plant, and make possible economies of greater division of labor and technical efficiency to the extent that larger increments would be added to the total product with each additional man employed. Production in a region of increasing marginal physical productivity could occur only when firms are selling in imperfect markets, however.[3] But in periods of low demand,

[1] "Monopolies and Labor Regulation," *Am. Econ. Rev.*, XXIX, Sept., 1939, pp. 551-552.

[2] R. F. Harrod, "Pigou's Theory of Unemployment," *Econ. Jour.*, March, 1934, p. 27.

[3] Increasing marginal physical returns would in general be accompanied by falling marginal costs. If firms selling in a purely competitive market were operating in a stage of decreasing marginal costs, any firm could profitably expand its output at the prevailing price since the demand for the product is perfectly elastic to the individual firm. Equilibrium for the short-run will only be reached when the firms are all producing at a stage of rising marginal cost and when marginal cost is equated to price for each firm. Hence a rising marginal physical productivity curve for a firm selling in a purely competitive market is impossible.

monopolists may restrict output to a point where they are operating in a region of increasing marginal physical returns in order to maximize profits or minimize their losses. In such cases, it is possible that the product of marginal physical productivity and marginal revenue might actually increase as more laborers are employed so that wth a rise in wages, employment and output for the short run would actually be greater following the rise in wage rates than before. That is, the employer would be maximizing his profits (or minimizing his losses) by hiring more laborers at the higher wage than it was profitable for him to hire at the lower wage rate.

The third, and perhaps most likely situation where the demand curve for labor would be positively sloped is the case where the marginal revenue curve to the individual firm selling in an imperfect market is positively sloped.[4] This situation would occur when the elasticity of the demand curve for the product is increasing rapidly so that total receipts are increasing at an increasing rate. When the marginal revenue curve is positively sloped, it is possible for the product of the marginal physical productivity of labor and the marginal revenue for the corresponding output to the firm to increase as employment in the firm increases, depending of course, upon the relative slopes of the two curves. This situation may occur even when the plant is operating beyond optimum capacity.

Let us assume the total physical product of a firm operating in an imperfect market to be some function $f(L)$ of the number of laborers employed. Let q, represent $f(L)$ or the total physical product, and q', the marginal physical productivity function or the first derivative of the total productivity function with respect to the quantity of labor, L. Assume also total receipts to the firm to be given by $p \cdot q$, and the marginal revenue function to be $\frac{d(pq)}{dq}$. Now the marginal net value productivity of L laborers will be equal to $q' \cdot \frac{d(pq)}{dq} - k$ where the constant k, equals the additional cost of variable agents other than labor which must be added with each additional laborer employed. The marginal net value productivity curve or the demand curve for the labor will be positively sloped when the first derivative of the above expression is greater than zero or when

$$\left[q' \cdot \left(\frac{d^2\,(pq)}{dq^2}\right)\right] + \left[\frac{dq'}{dq} \cdot \frac{d\,(pq)}{dq}\right] > 0. \tag{1}$$

The first condition under which this will be true is the case where both $\frac{d^2(p \cdot q)}{dq^2}$ and $\frac{dq'}{dq}$ are greater than zero or both the marginal revenue and the marginal physical productivity curves are positively sloped. The second condition under which expression (1) would be true is the case where the marginal revenue curve is positively sloped and the marginal physical productivity curve is negatively sloped but the negative elasticity of the marginal physical productivity curve is greater than the positive elasticity of the marginal revenue curve. The proof of this proposition is as follows:

[4] Again, however, a positively sloped demand curve for labor would be impossible for firms operating in purely competitive markets, since here the marginal revenue curve is perfectly elastic to the firm and coincides with the demand curve for the individual firm.

$$\text{Let } e' = \frac{\dfrac{d\,(pq)}{dq}}{q \cdot \dfrac{d^2\,(pq)}{dq^2}}$$

or the elasticity of the marginal revenue curve.

$$\text{Let } e = \frac{q' \cdot d(q)}{dq' \cdot q}$$

or the elasticity of the marginal physical productivity curve. Substituting these values in expression (1) or the first derivative of the marginal net productivity function we get

$$q' \cdot \left[\frac{\dfrac{d\,(p \cdot q)}{dq}}{q \cdot e'}\right] + \left(\frac{q'}{q \cdot e}\right) \cdot \left[\frac{d\,(pq)}{dq}\right]$$

Simplifying,

(2)
$$q' \cdot \left[\frac{\dfrac{d\,(pq)}{dq}}{q}\right] \cdot \left[\frac{1}{e'} + \frac{1}{e}\right]$$

Now if e, has a greater negative value than the positive value of e', the above expression (2) is greater than zero since all the other quantities are assumed to be positive. Hence, if the negative elasticity of the marginal physical productivity curve is greater than the positive elasticity of the marginal revenue curve, the demand curve for labor will be positively sloped. This is true because it has been shown that if the first derivative of the marginal net productivity function (1) is positively sloped, the demand curve for labor must be positively sloped.

The third condition under which a positively sloped demand curve for labor is possible is the case where the marginal revenue curve is negatively sloped and the marginal physical productivity curve is positively sloped. Going back to expression (2) or

$$q' \cdot \left[\frac{\dfrac{d\,(pq)}{dq}}{q}\right] \cdot \left[\frac{1}{e'} + \frac{1}{e}\right]$$

it will be seen that when the marginal revenue curve is negatively sloped, this expression will be greater than zero when the negative value of e', or the elasticity of the marginal revenue curve is larger than the positive value of e, or the elasticity of the marginal physical productivity curve assumed to be positively sloped.

I appreciate that in practice an increase in wage rates under conditions of a positively sloping demand curve for labor would not be likely to induce the employer to increase his labor supply since he ordinarily would not be aware that such a state of affairs existed. Nevertheless, if the employer were to leave the number of laborers employed by his firm unchanged, the laborers would be receiving a wage greater than the marginal net value productivity of labor to the

firm. Should the employer reduce his labor supply following the rise in wages, he would find his profits less (or losses greater) than before the reduction in employment, since under the conditions assumed, every decrease in the number of laborers employed reduces the marginal net value product. Following a rise in wage rates equilibrium for the short-run (and maximum profits for the firm) could be reached only with an increase in the number of laborers employed.

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Comment on Review of Cause and Control of the Business Cycle

In the review of *Cause and Control of the Business Cycle* which appeared on page 592 of the September, 1939, issue of the *American Economic Review,* the reviewer states: "The author has constructed an index of inflation which is based on the difference between what he calls investment—type assets of the American banking system and what he calls its savings—type liabilities. As it is obvious that such a classification cannot be carried out statistically with any theoretical precision (aggregate savings not being statistically measurable in any other sense than that in which they would equal aggregate investment by definition) the author must be understood to mean that he regards the data he has collected as *characteristic* for the development of the two items respectively."

It was my thought that this aspect of the question had been adequately dealt with on page 83 of the book, as follows: "In this connection, it is important to realize that only the banks can originate excess credit. An insurance company, for example, in making loans on policies merely gives the borrowers the use of funds already in its possession. The banks, on the other hand, can actually originate purchasing media in the form of credits to checking accounts. Therefore, *all the differential between total investment-type assets and total savings, for the entire country, is certain to be reflected in bank statements.* The index of inflation developed is consequently an all-inclusive criterion, not based on sampling alone, but encompassing *all pertinent data.*" (Italics as in the book.)

Many people seem to assume that in order to obtain the difference between two totals it is necessary to know the totals themselves. Actually, however, this is not at all necessary if we know that any difference which may exist (that is, any substantial difference) will ordinarily be found in one or more subdivisions of the major totals. Under such circumstances, it is only necessary to know the differences between the subdivision totals involved.

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A Note on Discontinuous Cost Curves

Since the triumph of geometry and calculus over arithmetic in the exposition of economic theory, very little attention has been devoted to the question of discontinuous cost curves.[1] If the actual discontinuities are minor in extent,

[1] The only exceptions in the modern literature (discontinuities were of course typical in the discussions of the older Austrian economists) that are known to me are M. F. W. Joseph, "A Discontinuous Cost Curve and the Tendency to Increasing Returns," *Econ. Jour.*, 1933, 390-98; E. Schneider, *Theorie der Produktion* (Vienna, 1934), pp. 51-57; and S. Carlson, *A Study on the Pure Theory of Production* (London, 1939), pp. 40-41, 50-52. None of these authors discusses the kind of discontinuous cost curve here examined.

the analytical convenience of treating costs as continuously variable with output is an adequate defense for the common practice.[2] But there are limits to the claims of analytical convenience relative to those of realism in the study of economic phenomena; theoretical problems of importance may be overlooked if exclusive reliance is placed on continuous cost curves. The present note is devoted to one case of discontinuity in the "short-run" cost curve of a firm.

In this case of discontinuous cost curves it is assumed that there are three productive services: one (C) fixed in quantity and two (A and B) variable in

TABLE 1

4 Units of A		5 Units of A		6 Units of A	
Quantity of B	Total product	Quantity of B	Total product	Quantity of B	Total product
1	20.	1	30.	1	35.
2	24.	2	35.	2	40.5
3	29.	3	40.5	3	46.5
4	34.	4	46.5	4	53.
5	38.5	5	52.5	5	60.
6	42.5	6	58.	6	66.5
7	46.	7	63.	7	72.5
8	49.	8	67.5	8	78.
9	51.5	9	71.5	9	83.
10	53.5	10	75.	10	87.5

quantity. Service B can be varied by very small amounts (*i.e.,* B is infinitely divisible), whereas A can change only by large units. (For example, C may be a factory building, B the labor-and-materials, and A some machinery that comes only in one size.) It is assumed that all of the conditions of the law of diminishing returns are fulfilled.[3] The data in Table 1 then represent the quantities of physical product that will be secured by applying various quantities of A and B to the fixed quantity of C. This table is necessarily incomplete with respect to variations in B, of course, since B was assumed to be infinitely divisible.

It will be observed that the applications of divisible service B to any fixed number of units of A yield a marginal product which (after an early stage of increasing marginal product) decreases continuously. Moreover, when the number of units of the indivisible service (A) is increased by one, the entire schedule of returns shifts upward. These shifts also obey the law of diminishing returns: thus 4 units of A and 3 units of B yield a product of 29, 5 of A and 3 of B a product of 40.5, and 6 of A and 3 of B a product of 46.5.

By assigning prices to the various productive services it is possible to derive

[2] *Cf.* the classic statement on this point by Pareto, *Manuel d'Economie Politique,* 2nd ed. (Paris, 1927), pp. 172-75.

[3] As I have pointed out elsewhere, the conditions necessary to insure diminishing returns are not likely to be fulfilled in the "short run." But the complexities involved in short-run phenomena do not affect the principle of the present discussion, and they could be recognized in the present example. *Cf.* my "Production and Distribution in the Short Run," *Jour. of Pol. Econ.,* 1939, 305-27.

a set of cost curves. These are displayed in Figure 1, where *AVC* and *MC* are the average variable and marginal cost curves, respectively. It is apparent from inspection of Table 1 that there are (at least) three different average variable costs of producing an output of (say) 35 units, depending on whether one uses 4 A and (slightly more than) 4 B, 5 A and 2 B, or 6 A and 1 B. The subscripts on the cost curves therefore denote the number of units of the indivisible variable service on which that particular cost curve is based: there are different cost curves for each possible number of units of indivisible variable service (A).

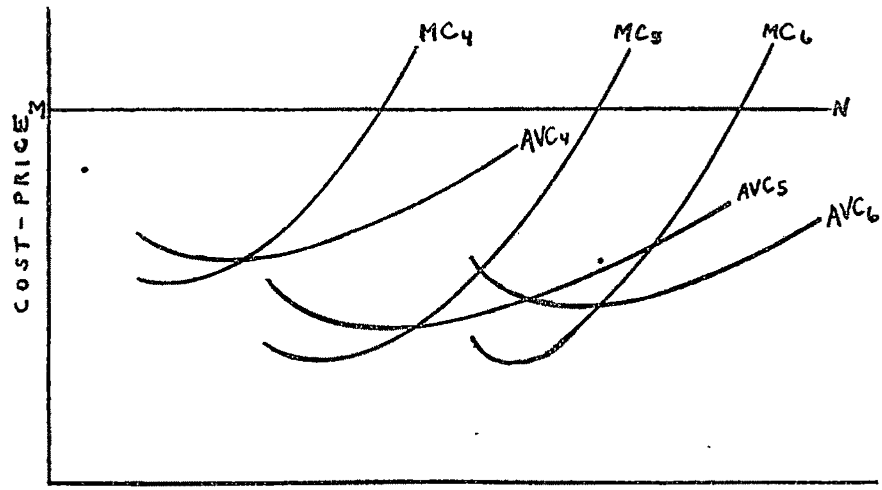

FIGURE 1

The noteworthy feature of Figure 1 is that at any given price (represented by the line *MN*), marginal cost equals price at many outputs: this familiar criterion of competitive output is not unique when there are indivisible services. The most profitable output can be determined only by comparing the total net profits at the various outputs indicated by the intersection of the marginal cost curves and the price line.[4]

These questions arise: (1) Is this set of cost curves realistic; and (2) Does it modify our interpretation of economic phenomena? The first question cannot be answered in the elementary state of our knowledge of statistical cost curves, but the assumptions on which this case rests are of a type which may plausibly be urged to be more typical than the case of infinite divisibility of all productive services. No great claims are made for the present apparatus, in reply to the second question. One possible rôle may here be assigned to the multiplicity of outputs for which marginal cost equals marginal revenue. A monopolist who is not familiar with the entire range of his demand curve (and surely he is

[4] The resemblance between this series of short-run cost curves and that other series whose envelope is the long-run average cost curve, is only superficial. The latter series is based on the variability of all productive services; here one (C) is kept constant. An envelope can be derived only if all services can be varied by small amounts; it is the nature of the present case that this is not possible for service A.

ypical) may operate at *an* output which equates marginal revenue to marginal cost. But in light of the uncertainty regarding the marginal revenue from larger (or smaller) outputs, he may not attempt to verify that his present profits are at *maximum maxima*. Systematic differences between actual and (from the producer's viewpoint) ideal output become possible.

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Experience Rating in Wisconsin in 1940

Initial results of experience rating under the Wisconsin unemployment compensation act were discussed in an article in the December, 1939, *Review.*[1] Wisconsin was the first state to experiment with the idea of encouraging em-

Table I
Comparison of 1938, 1939 and 1940 Contribution Rates for 244 Wisconsin Employers

Rate per cent	1938		1939		1940	
	Employers	Per cent	Employers	Per cent	Employers	Per cent
0	2	0.8	5	2.2	21	8.6
1	6	2.5	99	40.5	107	43.8
2.7	236	96.7	78	31.9	75	30.8
3.2	—[1]	0	62	25.4	14	5.7
3.7	—[1]	0	—[2]	0	27	11.1
	244	100.0	244	100.0	244	100.0

Three of the 247 firms interviewed are excluded from this tabulation because one is a subsidiary of another and two are now out of business. Rate estimates for 1939 are as of May 1939; those for 1940 as of June 1940.

[1] No employer was liable for a higher-than-standard rate before 1939.

[2] Those employers who contributed at the rate of 3.2 per cent in 1939 and failed to fulfill certain conditions by the end of the year are required to pay 3.7 per cent on their payrolls during 1940 if their reserve percentages are less than 2.5 per cent. The 3.2 per cent rate is assessed against those employers with a reserve percentage between 2.5 and 4 per cent.

ployers to stabilize employment through reduced contribution rates and through provisions for increased contribution rates reflecting the unemployment hazard of irregular operations. The article referred to was based on a study of the experience of 247 Wisconsin employers of various sizes and in all major lines of business. At that time, the 1939 contribution rates were the latest available, and during the field study in 1937-38 only a few employers were able to qualify for lower rates in the first year in which reductions were possible—1938.

It was pointed out that 1938 rate reductions were secured in nearly every case under unusual circumstances, such as having a smaller payroll in 1937 than in 1936, thus increasing the reserve percentage, or by making a voluntary contribution sufficient to bring the reserve fund up to the necessary percentage. The 1939 rates, however, were said to be more typical of the normal result under

[1] "Employment Stabilization and the Wisconsin Act," *Am. Econ. Rev.*, xxix (Dec., 1939), pp. 708-723.

experience rating, and certain conclusions were drawn from an analysis of the 1939 rates for firms interviewed. The contribution rates for 1940 for these same firms are now available, and a comparison with the earlier years' rates is presented in Table 1.

Further analysis of the 1940 contribution rates for firms interviewed confirms many of the conclusions based on an examination of the 1939 rates.

(1) As in 1939, more firms, which during 1937-38 had done little or nothing to stabilize under the Act because they had done so before or because their businesses were naturally stable, qualified for reduced contribution rates than did those firms which had accomplished during 1937-38 appreciable or some stabilization under the impetus of the Act. Sixty-eight, or two-thirds of the firms in the former group, secured zero or 1 per cent rates for 1940, while only 37, or over half of those in the latter group, qualified for the lower rates.

(2) Of the 27 firms which were considered to have stabilized appreciably during 1937-38, a larger proportion of the capital or durable goods firms failed to qualify for reduced rates than in the case of the consumers' goods or service firms. Two of the three zero rates in this group, however, were secured by firms in businesses which are normally quite seasonal—meat packing and retailing (department store). Only one of the 27 firms will be required to pay a higher-than-standard rate in 1940, as compared to three in 1939.

(3) Three-fifths of the firms interviewed which must pay the 3.2 or 3.7 per cent higher-than-standard rates in 1940 are those in which stabilization under the Act during 1937-38 had been largely unsuccessful or little attempted, and difficult or impossible because of the nature of the business. Half of the 3.7 per cent rates were assessed against firms which happened to be in only one of the ten stabilization groups—where there had been no stabilization under the Act because the nature of the business made it difficult or impossible. It is also interesting that only one of the eleven still-active firms which appeared to have ignored the Act in 1937-38 will have to pay a higher-than-standard rate in 1940, while three (including a laundry and a small bakery) qualified for a zero rate and six for a 1 per cent rate.

(4) As in 1939, also, an important minority of firms in industries where stabilization during 1937-38 was limited by difficulties or considered difficult or impossible have qualified for reduced 1940 contribution rates. Fourteen per cent of the zero rates and 28 per cent of the 1 per cent rates were secured by firms in these groups. Four-fifths of these, however, were in consumers' goods and service industries, such as brewing, meat packing, department stores and trucking.

Finally, some significant trends may be observed by a comparison of the 1939 and 1940 rates for firms interviewed, as shown in Table 1. The number of firms qualifying for reduced rates has again increased with the passage of additional time for building up reserves and reserve percentages through bona fide stabilization, benefit avoidance, or continuance of existing policies in already stable businesses. The greatest absolute and relative increase has been in the zero rate group. On the other hand, with about the same number of firms paying the standard 2.7 per cent rate in both 1939 and 1940, there are fewer in the higher-than-standard rate group in 1940 than in 1939—a decrease of one-third.

Although generalizations on the basis of a small but representative sample are somewhat hazardous, these facts indicate that as there is more time under experience rating, more firms are able to qualify for lower contribution rates and fewer increased rates apply. This is undoubtedly explained in part by con-

tinued effective stabilization efforts encouraged by the Act,[2] but one conclusion of the 1937-38 field study was that, under the reserve percentage form of experience rating, many firms are able to qualify for reduced rates without any additional effort because they happen to be in already stable businesses. If one accepts the argument that experience rating allocates the "social costs" of unemployment among firms, this result is desirable. On the other hand, if the "social cost" proposition is regarded as untenable, the rewarding of firms in naturally stable businesses is not the most effective sort of experience rating.

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[2] Another factor accounting for the fewer number of increased contribution rates in 1940 is the change made in the Act by the 1939 amendments. Under the old provisions, an employer whose reserve was only slightly less than 7.5 per cent might still have to pay an increased rate during the ensuing year if benefits charged against his account during the year just ended exceeded his contributions for that year. The 1939 amendments eliminated this and made increased rates applicable only to those employers whose reserve percentages were less than 4 per cent. As a result, some of the employers who had increased rates in 1939 under the old provisions were able to drop back to the standard rate in 1940 under the amended law.

General Works, Theory and Its History

Capital Expansion, Employment, and Economic Stability. By HAROLD G. MOULTON, GEORGE W. EDWARDS, JAMES D. MAGEE, and CLEONA LEWIS. (Washington: Brookings Institution. 1940. Pp. xv, 413. $3.50.)

This volume is divided into two major parts: the first deals with "Investment trends and capital requirements" and the second with "Government policies and private capital expansion." Much of the material in both sections is well and interestingly presented. Many of the recommendations seem reasonable (and some unreasonable). But I propose to devote this review to a discussion of the book's fundamental thesis and not to an appraisal of specific recommendations.

The jacket tells us that the volume contains "a comprehensive analysis of the phenomenon of idle money, idle factories, and idle men"—*i.e.*, of the business cycle. Yet it contains no explanation whatsoever of the business cycle.[1] This lack of focus makes the first part of the book diffuse, with sections only distantly relevant to the problems under discussion. But perhaps even more important, it makes it impossible for the authors to *demonstrate* that the carrying out of the recommendations in the second part of the volume will make any substantial contribution to recovery.

In the first section the material which would normally be most interesting to the economist is that on "investment outlets"; but what the term means is never made clear.[2] True, Dr. Moulton mentions the divergence between capital formation and security issues. But he includes the deficit of the federal government (which hardly all results in capital formation) among "investment outlets," and corporate saving (much of which may not enter the security market) among the sources of "investment funds," so that the exact meaning of "investment outlets" or "investment funds" remains completely obscure.[3]

[1] If there is any implicit theory it is that which Dr. Moulton put forth in the recent Brookings series on income and economic progress (*America's Capacity to Produce, America's Capacity to Consume, The Formation of Capital,* and *Income and Economic Progress*). This theory the present reviewer has criticized in detail and as yet without rebuttal ("Dr. Moulton's Estimates of Savings and Investment," *Am. Econ. Rev.,* Sept., 1937; and "Moulton's Theoretical Analysis," *Pol. Sci. Quart.,* Sept., 1938), so that nothing more regarding it need be said as yet.

[2] It may, of course, mean: (1) security flotations; (2) outlets through which savings are spent on current output; (3) outlets through which savings are spent on current output of producers' goods; (4) capital formation; or (5) capital formation financed by security flotations.

[3] Many other examples of the resulting confusion could be cited but close analysis is obviously impossible, as Dr. Moulton argues that saving has been in excess of investment (pp. 190-1) since the World War without explaining the sense in which he is using these terms.

Next, the argument of those like Professor Hansen who stress the relation between population growth and economic activity is reduced to the following: "The conception of population growth as a controlling factor in economic expansion . . . is based on the assumption that the only impetus to economic growth is that which comes from increased numbers of people" (pp. 167-8). This statement being obviously untrue, it can safely be branded by the authors "an elementary fallacy" (p. 168). It is, of course, a clear misrepresentation of Hansen's position, *even as stated in the one quotation from Hansen that the authors care to use.* For in it Hansen makes it quite clear that the economic growth of the nineteenth century involved not only population growth but also expansion into new territories and that "the *combined* effect of the declining population growth, *together with the failure of any really important innovations of a magnitude sufficient to absorb large capital outlays,* weigh very heavily as an explanation of the failure of the recent recovery to reach full employment."[4]

Having knocked down to their satisfaction the straw man thus set up, the authors go on to argue that *if the demand for output is increased sufficiently,* there will be a substantial demand for investment funds. But the problem of how a sufficient demand can be generated[5] is never faced directly. The volume concludes from its analysis of the security markets that "the restricted flow of funds into investment cannot be explained by abnormal conditions in the private capital market" (p. 334); but it discusses only the way in which government policies may have restricted the flow of private capital, clearly implying that the trouble rests with the government. In the absence of an explanation of the business cycle, however, there is no way of *demonstrating* that the government is responsible.

Many business cycle theorists, as a result of their analysis, have concluded that, even if the capital markets are in satisfactory shape, the absence of sufficient investment demand to bring about full recovery is largely the result of factors independent of the actions of the government and that actually government activity has on the whole been favorable to recovery.[6]

[4] Quoted p. 162. My italics. Hansen's conclusion that perhaps half of the capital formation up to 1929 may have resulted from the growth of population and its expansion into new territories, clearly implies that the other half of capital formation was accounted for by other factors such as technological developments. Yet this conclusion is dismissed by the authors in a footnote with the comment that "Hansen makes a passing reference to this fact (that technical improvements provide an outlet for capital even without population growth), but without apparently incorporating it into his thinking" (p. 168).

[5] In terms of what is probably the most widely held explanation of the cycle, the basic question is whether at the level of income required to provide the assumed *demand* for investment funds, the *supply* of such funds would not be in excess of the estimated demand, so that the level of output involved could not be reached or at least permanently maintained. This analysis has, of course, no meaning to Dr. Moulton, who argues that savings have been in excess of investment since the World War.

[6] The volume never considers whether the national income would have been lower

The reviewer, as a result of his analysis (which this is obviously not the place to develop) has come to a similar conclusion.[7] Until the authors provide an analysis of the factors responsible for "idle money, idle factories, and idle men," their contrary conclusions must remain unsubstantiated opinions.

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Normal and Abnormal International Capital Transfers. By MARCO FANNO. Stud. in econ. dynamics, no. 1. (Minneapolis: Univ. of Minnesota Press. 1939. Pp. xi, 120. $2.00.)

Professor Marco Fanno (Padua, Italy) has revised his 1934 study entitled *I Transferimenti Anormali dei Capitali e le Crisi* to inaugurate the University of Minnesota's new series. For a publication occupying this conspicuous place, the monograph is disappointing: it falls short of an "admirable recapitulation," as the editors proclaim it to be, and the "new ground" broken does not promise to be very fertile.

The first three chapters are devoted to the mechanism of capital transfers and the contrast between normal and abnormal capital movements. The author gives a clear description of the price-specie-flow transfer mechanism, devoting only a footnote (p. 17) to its contrast with the demand-shift reactions described by Ohlin, Nurkse, and others. It is the distinction between normal and abnormal transfers which ostensibly breaks new ground. Professor Fanno makes two explicit requirements of normal transfers: that they represent responses to differentials in *net* interest rates (p. 9) and that they arise from *voluntary* saving (pp. 20, 27-29); he seems to imply also that the receiving country must acquire the capital in order to "use" it (pp. 21, 30) in public or private enterprise.

While it would be generally agreed—it is certainly no discovery—that capital movements which can loosely be described as "normal" arise as a consequence of interest differentials, the author's attempt to draw a sharp line between normal and abnormal by admitting only those interest rates which embody the "economic risks of *normal* times" (n. 6, p. 9, his italics) is gratuitous and full of pitfalls. The League of Nations' *Economic Survey* has for years made amply evident the persistence of divergences in the *Konjunktur* of various countries, whatever the world trend may be. On the basis of interest rates of "normal times," all capital movements produced

except for the outlet for investment funds provided by deficit spending, although such spending is given as the major outlet for such funds in recent years (p. 35); nor is the rôle of high taxation of incomes in reducing the supply of investment funds ever mentioned as an offset to the effect of such taxation in reducing investment outlets.

[7] This is so despite the fact that he agrees with a number of the specific criticisms put forth in this volume against government policies.

by these differing *Konjunktur* are, according to Fanno, "abnormal"; but he does not himself mention this inclusive case in his specific enumeration of the causes of abnormal transfers (p. 31). The second criterion of normalcy is still more suspect. In the first place the concept is not operational, because of the impossibility of distinguishing empirically between voluntary and involuntary savings. In the second place, the distinction can be made only *ex ante,* whereas the transfer mechanism pertains to capital regardless of origin, *i.e., ex post.* Finally, the implication that a normal capital movement must be "taken" in goods and services excludes such a transfer as a stabilization loan, for which there is no good reason to deny a normal character. As in most other cases, "normal" and "abnormal" are rather elastic concepts; the best means of differentiation are similarly pragmatic, such as Fanno's list of clearly abnormal causes (p. 31).

Chapter 4 on "Indemnities and the repayment of war debts" seems to mix the normative and the purely analytical in setting as a "limit" to these compulsory levies a certain reduction of the standard of living; "but this cannot *reasonably* be carried beyond the point at which the physical, intellectual, and moral qualities of the population begin to deteriorate *irreparably*" (p. 34, my italics). For the rest, the chapter presents conventional arguments against the idea that reparation transfer proceeds automatically.

Chapters 5, 6 and 7 are concerned with the attributes of flights of capital and their repercussions upon the domestic and the receiving economies; and chapter 8 explains that the concentration of gold in a few countries, chiefly in the United States, does not prove the Ricardian law regarding the distribution of precious metals to be in error, since the conditions postulated by that law are lacking.

The monograph contains references to a wide range of literature in several languages on topics relevant to its themes. It will introduce students of economics to a number of the most important topics under discussion during the twenties and early thirties after the world financial crisis.

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Monopolistic Competition and General Equilibrium Theory. By ROBERT TRIFFIN. Harvard econ. stud., vol. lxvii. (Cambridge: Harvard Univ. Press. 1940. Pp. xiii, 197. $2.50.)

The nature and purpose of this little book is well summarized in the publisher's note:

Economists have now generally accepted the theories of imperfect and monopolistic competition, but these theories have not yet reached a crystallization point

where individual expositions are merged into a common body of thought. What is most needed at this juncture is a general restatement aiming at a clarification of the present position of the theory, consolidating the progress made so far, and attempting to carry the whole subject on into new and uncharted lands. To this task Mr. Triffin has addressed himself. He first offers a critical comparison and synthesis of the works of three leading exponents of the new theories: Professor Chamberlin, Mrs. Robinson, and H. von Stackelberg. This discussion clears up the relationship between these various expositions and indicates the main sources of disagreement and obscurity. Further chapters consider the main deficiencies of monopolistic competition theories in their present stage, outline the contours of a theory of external interdependence, launch a more thorough investigation of pure competition in which account is taken of the vital importance of rising marginal cost for the definition of a horizontal sales curve, and extend the theory of external interdependence to questions of profit and entrance into the industry.

All this looks like a rather ambitious undertaking, particularly for a young man; but Mr. Triffin has done it well. Such a summary of monopolistic competition doctrine will be welcomed by economists who have not time to read all the literature on the subject; and since it was checked by Professors Chamberlin, Schumpeter, and Leontief, and by others interested in the subject, it may be assumed to present the views of the writers discussed with reasonable accuracy. At various points the author offers original suggestions of his own—as for instance in his repudiation of the concept of an "industry," and his substitution of "the whole collectivity of competitors"—since all products compete more or less with any given product. Some will regret that he does not follow Chamberlin in discussing distribution as well as value, and perhaps mathematically inclined economists will wish that he had included more of the mathematical formulas and graphs with which so many of the newer theoretical treatises are graced, embellished, clarified or encumbered, but it would be quite unfair to expect more in so small a book.

This compact, thoughtful little book raised in the reviewer's mind two questions regarding the book itself and regarding the work of the monopolistic competition school. First, is there not too much of a tendency to offer the monopolist competition analysis as something so good and definitive that it must *replace* most or all of the work of the classicists since Adam Smith. Professor Triffin's statement that "the way is now open for the building up of a different type of economics" illustrates this point of view, in its more modest form. No one who is familiar with the works of Chamberlin, Mrs. Robinson, and others would deny the significant contributions they have made; but why is it not possible to recognize more clearly the value of some of the work done previously, and to accept some of the new doctrine as *supplementing* rather than *superseding* the earlier work. For some hundred years or more the theory of particular equilibrium

seemed significant, and the works of the classicists, particularly Marshall, seemed to many men worth careful study; but within the past decade or so we have seen the emergence of at least three "new schools" determined to throw all the old stuff into the ash can and build a new economics that would really solve problems. Some of the institutionalists favored purging the curricula of Marshall and all his predecessors "in toto"; then came Keynes with his jargon of un-English and bad English terms, and good English terms with strange, new meanings, declaring that the classical economics was quite unusable, and that it must be discarded; and now some of the monopolistic competition school seem to believe that this "newer economics" practically supersedes the classical doctrine, and renders it largely obsolete. Such a view has not indeed characterized the outstanding figures in the school so much as some of the corporals and buck privates, but at any rate such a view seems to be too generally held.

A second question raised by this summary of monopolistic competition theory relates to the final results of the movement represented by the monopolistic competition school. These men have applied Marshall's concept of relativity to the problem of monopoly, elaborating and developing what Marshall discussed only briefly; but the concept of relativity has yet to be applied to many other economic questions before we can be entirely realistic in our thinking. Many of the distinctions we make in economics are relative—between rent and interest, for instance, between rent and wages, wages and interest, rent and profits, productive and unproductive, earned and unearned, poverty and wealth, necessities and luxuries, use and waste. Few important economic terms, if any, can correctly be given the clear, definite meanings that they have in economic treatises, any more than can the concept of monopoly. Yet if we were to stress the relativity of our terms properly and consistently, we should make of economics such a nebula of loose ends that it would at least cease to be teachable. Certain philosophers and psychologists have done some such thing with their studies.

John Ise

University of Kansas

A Social Approach to Economics. By Harold A. Logan and Mark K. Inman. (Toronto: Univ. of Toronto Press. 1939. Pp. xvi, 659. $3.75.)

This is another general economic text but it is the first of university grade to be designed especially for Canadians. It is so designed in the sense that the examples used in description of the functioning of the price mechanism in a relatively free economy are those of the Canadian setting and the economic institutions described and the problems of applied economics discussed are mainly Canadian, although some of the problems and

institutions of the United States, Great Britain and Australasia are described for contrast or for suggestion as to possible development of Canadian institutions.

It is not a treatise on the Canadian economy of the type that is written for economists. It does not follow recent Canadian economic historians in picturing the planned and unplanned adaptation of an economic system to the distinctive economic problems presented by Canadian geography, population characteristics and national political purposes and by the impact of changing techniques and changing world conjunctures. The distribution of space among discussions of various economic problems is seemingly determined, not by the relative importance of these problems in the Canadian economy but by their relative values for the teaching of elementary applied economics; the limited discussion of agricultural, transportation and public ownership problems, compared with the extended discussion of problems of industrial labor, may only thus be explained. It is essentially designed as a teaching text.

The title requires some explanation. It probably is intended merely to warn the beginner in advance that "the point of view of economics is that of attaining satisfactory living for the whole group" and not primarily that of "forging tools to enable the individual to enrich himself": it cannot be intended to mean that the approach of this book is more "social" than that of most other general texts. To the reviewer, a social approach to economics would seem to require a rigorous analysis of the precise meaning of "satisfactory living for the whole group" and constant evaluation of the details of the economy in terms of their contribution to this objective—that is, something like a Pigou or Meade for beginners—and such is not the approach of this book. Such an approach would, of course, probably be too difficult for beginners not yet trained in handling the tools of economic analysis.

Canadian teachers of economics are seriously questioning the possibility of adequately surveying the field for the general student and the beginning specialist in less than two one-year courses, one in pure theory and analytical methods and the other in historical, technological and institutional material. This text represents an attempt to overcome the objections to overloading in existing single courses, without reducing the rigor of treatment of the theory of pricing, but by making the institutional material more elementary and more familiar. The reviewer has not yet taught this text but believes it can be taught more successfully than existing texts in Canadian universities using the one-course introduction to economics.

John S. Allely

University of Saskatchewan

NEW BOOKS

BARNES, H. E., BECKER, H., and BECKER, F. B., editors. *Contemporary social theory.* (New York: Appleton-Century. 1940. Pp. xx, 947. $5.)

BEKKER, K. *Marx' philosophische Entwicklung: sein Verhältnis zu Hegel.* (Zürich: Oprecht. 1940. Pp. 134.)

BORNEMANN, A. *J. Laurence Laughlin: chapters in the career of an economist.* (Washington: Am. Council on Public Affairs. 1940. Pp. ix, 98. $2.50.)

Biographical sketch and chapters on Laughlin's interest and activities as assistant professor at Harvard, teaching at Chicago, silver campaign of 1896, federal reserve act, influence of Dunbar, attack on the quantity theory of money, and an appraisal of Laughlin as an economist.

CHANDLER, L. V. *An introduction to monetary theory.* (New York: Harper. 1940. Pp. xi, 216. $1.50.)

CLARK, C. *The conditions of economic progress.* (New York: Macmillan. 1940. Pp. xii, 504. $5.)

COMSTOCK, A., editor. *The Canadian economy.* Mt. Holyoke Coll. stud. in econ. and sociology, no. 2. (South Hadley: Mt. Holyoke Coll. 1940. Pp. 47. 25c.)

FAIRCHILD, F. R., FURNISS, E. S. and BUCK, N. S. *Economics.* Rev. ed. (New York: Macmillan. 1940. Pp. xxxi, 828. $3.)

Essentially an abridgment of the authors' well known two-volume *Elementary Economics,* this book is designed for use in the one-semester course. Originally appearing in 1937, it has now been thoroughly revised apparently for the purpose of improving the presentation of principles, of changing somewhat the emphasis on certain subjects and of incorporating into the discussion the latest developments and newest facts. All this has been accomplished and more. Well chosen exercises have been introduced here and there throughout the book; and, last though not least from the students' point of view, the format has been greatly improved.

The revision has altered the chapters on value considerably. "The whole section on price has been reorganized and largely rewritten in order to incorporate the concept of imperfect competition as an integral part of the theory of price. Imperfect competition and pure competition, as well as monopoly, have been merged in a unified treatment. . . . "

Revision of chapters devoted to money and banking resulted in a somewhat more compact and orderly presentation, and in interesting shifts of emphasis. Thus bimetallism which was allotted four pages in the first edition is now dismissed with twelve lines. The gold bullion and gold exchange standards, virtually ignored in 1937, are now briefly, but helpfully described. As befits the times there is an increased emphasis on managed currencies and the instruments of currency control.

Other noteworthy changes are in the form of supplementary facts: *e.g.,* in the discussion of foreign trade policy and of labor legislation, recognition of recent developments in practical affairs has led to desirable additions which make these presentations as up to date as is possible in these turbulent times. Of greater significance is the complete omission of the chapters on risk, insurance and speculation, and on profit sharing, copartnership and coöperation. The latter may have been sacrificed (the reviewer thinks unfortunately) to make room for a new and timely chapter on German and Italian fascism.

ALVIN S. TOSTLEBE

FROMAN, L. A., with the assistance of MCCRACKEN, H. L. *Principles of economics.* (Chicago: Richard D. Irwin. 1940. Pp. xii, 702. $2.50.)

GEMMILL, P. F. *Problem questions in economic principles.* (New York: Harper. 1940. Pp. 83. 50c.)

GOURVITCH, A. *Survey of economic theory on technological change and employment.* Rep. no. G-6. (Philadelphia: WPA, Nat. Research Project. 1940. Pp. xiii, 252.)

A comprehensive and useful task has been accomplished in this volume. In the reviewer's knowledge it is the first attempt systematically to distill from the vast literature on the economic thought of two centuries what individual economists have considered to be the economic rôle of technological change.

Since the scope of this change ranges from inventions of labor-saving machines to more efficient use of substitute materials and fuels and of men, and since the effects on employment and unemployment of the application of new techniques may fall remotely distant from both the place and the time of their original introduction, analysis "appears to involve the fundamentals of our economic system" and bears upon "production and employment, markets and prices, distribution of income, capital accumulation and investment, factors of stability and of disturbance, cyclical fluctuations and long-term trends, and the very concept of economic progress."

The survey is built around the two basic problems of market expansion and increasing supply of capital as requisites for a growth of employment. The author finds greater adherence to fact in the theories of short-run and long-run business fluctuations in which growth of employment accompanies technological change *in process* than in the premises of dynamic equilibrium theory (which considers change a factor of disturbance to be adjusted through the action of the several price mechanisms). The final chapter analyzes divergent theories of long-term trends with reference to variations in the pace and the type of change and to possible retardation and stabilization of the pace. The survey is faithfully documented and carries an author index.

ELIZABETH F. BAKER

HAMILTON, W. H. *The pattern of competition.* (New York: Columbia Univ. Press. 1940. Pp. vi, 106. $1.25.)

LEWIS, W. A. *Economic problems of today.* (New York: Longmans Green. 1940. Pp. 191. $1.25.)

MANOÏLESCO, M. *Die theoretische Problematik des Aussenhandels: Synthese—Beweisführung—Polemik.* (Kiel: Inst. f. Weltwirtschaft an der Univ. Kiel. 1940. Pp. 82.)

"In the first place the author presents his philosophic conception of the unequal importance attached to work and capital in the process of production. He reaches the conclusion that these two factors cannot be considered as being symmetrically situated and on the same level; rather is the factor work primordial and original like man himself, whereas the factor capital is solely and simply created by man, in the nature of an intermediary which shortens the way of production.

"Thus the degree of productivity of work—without considering the importance of capital which accompanies it—comes to be a fundamental criterion by means of which the national value of any one branch of production and the most exact expression of the hedonistic principle can be determined."

VON MISES, L. *Nationalökonomie: Theorie des Handelns und Wirtschaftens.* (Geneva: Ed. Union. 1940. Pp. xvi, 756. Fr. Sw. 23.)

MOORE, J. H., and others. *Modern economics: its principles and practices.* (New York: Nelson. 1940. Pp. 499. $2.75.)

PAGE, C. H. *Class and American sociology: from Ward to Ross.* (New York: Dial Press. 1940. Pp. xiv, 319. $3.50.)

In general, the study analyzes the views of the six sociological fathers with respect to: (1) the historical setting in which they took shape (see ch. 1); (2) their philosophies of history and historical change, pointing up the emphasis they placed upon economic and class factors, an emphasis most notable in the writings of Ward, Sumner and Ross; (3) their analyses of class structure and class psychology; (4) their treatment of the relation of the state to class organization; (5) their views on trade unions, labor problems, socialism, etc. Especially significant is the contrast between the laissez-faire Spencerian notions of Sumner and Giddings and the anti-Spencerian collective approaches of Ward, Small, Cooley, and Ross. This is tied in with their regional backgrounds. For a good summary of these points see pp. 249-251, and note especially their *middleclass* stress.

Of especial interest to the economist are: their relation to Veblen (see pp. 24-25, 48-49, 99, 122n, 130n, 135, 200-201, 225-226); their rejection of laissez-faire (they were mostly trained as economists); their critiques of capitalistic economics (see especially Ward, Small, and Ross); their treatments of trade unionism (see pp. 67, 107-108, 139, 147, 176, 203-206, 244). Their views, especially those of Ward, Small, Cooley and Ross, are a theoretical forerunner of much of the "New Deal" trends.

In their several treatments they indicate the necessity, according to Page, of viewing class, in its dual aspect: "socio-economic" and "socio-psychological" (see pp. 252-254.)

As a general evaluation, I should say that the book is a scholarly, thoroughly documented exposition of a body of sociological and economic thought, indigenous to America, and hitherto not brought together. It is no doubt a contribution to the history of American social thought, representing, in large part, a study of the critical reactions of six of our major social scientists to the growing contradictions of capitalism. Furthermore, it illustrates, in my mind, the early growth of a distinctly *native* theoretical rebellion, dissociated, save for Small, from the Marxian developments.

MYRON LIVINGSTON HOCH

PIROU, G. *Les nouveaux courants de la théorie économique aux Etats-Unis.* Tome II. *L'économie institutionnelle.* 2nd ed. (Paris: Domat-Montchrestien. 1939. Pp. 230. 85 fr.)

The first chapter forms, doubtless, the most original part of this survey of institutional economics. The essential contrasting differences between classical and modern psychology, the repercussions of the new currents in psychology upon economic theory are effectively indicated. The ideas of Ely, Commons, Berle and Means dealing with the development of the juristic notions of economic facts, the institutional economic views of Commons, Atkins, *et al.*, are pointedly stated. While there is no accord among American economists regarding the notion, import and value of institutionalism, French jurists have successfully clarified and defined the notion of institution by contrasting

it with contractualism, governmentalism and rationalism. Pirou thinks institutionalism has furnished a more realistic and more relativistic view of the *cadres* of economic life than either classical or neo-classical economics, but has in no sense as yet reconstructed the theory of the economic mechanism.

HERMAN HAUSHEER

SIKES, E. R. *Contemporary economic systems: their analysis and historical background.* (New York: Holt. 1940. Pp. xiv, 690. $3.)

As a manual, this book has the great advantage of being distilled from many years of experience in teaching the subject to college classes. The first third consists of a concise description and critique of our eonomic order and historical sketches of other proposed systems. It forms a compact and coherent introduction to the rest of the book, which describes the systems founded later upon the dissenting ideas. There are a few stretches in this third of the book (notably in the condensed theoretical statement, part 1), which college students may find rather heavy going, though worth it.

Part 3 deals with "Russian communism in practice." Part 4 devotes four chapters each to "Italian and German fascism." The fifth and last part is entitled "The coöperative movement and economic planning." It is mainly, though not exclusively, devoted to modifications without revolution in systems which remain "private capitalist." Each section describing an economic system is followed by a brief "evaluation." These appraisals are carefully and shrewdly stated by a mind familiar with economic reasoning and are an agreeable surprise after the sort of thing one generally reads on these subjects.

The book is a careful though fairly brief description and analysis, practically free from prophecy and moralization. It is intended for the enlightenment of grown people who already know something about economics and have a background equivalent to the earlier years of college for considering these broad but at present unescapable problems. For its purpose, the reviewer thinks it by far the best treatise he has seen. The specialist who is able to criticize or build up certain sections should not find it difficult to fit his own contributions as a teacher into the general structure of the book.

M. M. KNIGHT

SILBERNER, E. *Un manuscrit inédit de David Ricardo sur le problème monétaire.* Extrait de la *Rev. d'Histoire Econ. et Sociale,* xxv année, nos. 3-4. (Paris: Rivière. 1940. Pp. 195-259.)

SPAHR, W. E., editor. *Economic principles and problems.* Vols. I and II. 4th ed. (New York: Farrar and Rinehart. 1940. Pp. xix, 572; xviii, 660. $2.50, each vol.)

The new edition of this text offers a number of changes. Trade unionism, discussed by Edward Berman in the third edition, is taken up by Emanuel Stein in this edition; production, formerly discussed by A. G. Black, is handled by Jules Backman and Edward Bullock; capital, analyzed by George Haskell in the earlier edition, is discussed here by Robert Martin; the chapter on "resources" by Erich Zimmermann, and the one on "evolution of economics" by Lewis Haney, are omitted. Perhaps the most important change, however, is the substitution of Bruce Knight for Professor Fetter in the chapters on value.

Knight gives more of the new imperfect competition analysis than appeared in the third edition, but less than many writers of the "new school" will probably want. In general, the revision is well done, and should enhance the usefulness of this excellent text.

J. I.

WESTMEYER, R. E. *Modern economic and social systems.* (New York: Farrar and Rinehart. 1940. Pp. viii, 604. $3.)

As a result of the current practical application of new economic and social philosophies and policies over large areas of the world, we may now study radically different economic systems, not as theoretical possibilities, but as going concerns. The volume under review is one of a growing number of recent books that describe and compare various types of economic organization in terms of underlying philosophy, operation, and results.

The book begins with an account of early movements for economic and social reform, and considerable space is devoted to the various aspects of utopianism. Then follows more comprehensive treatment of Marxism, soviet communism, anarchism and syndicalism, fascism in Italy and national socialism in Germany. The appendix includes the *Communist Manifesto*, the *Manifesto of the Third International*, Mussolini's *Doctrine of Fascism*, and the *National Socialist Party Program*. The book is provided with a separate list of reference readings for each chapter, and also with topical bibliographies including helpful evaluations of the individual items.

As might be expected in a book of this nature, considerable space is given to the doctrine and influence of Karl Marx. There is also a rather lengthy discussion of anarchism and syndicalism. Two very interesting chapters deal with utopianism in America, and modern literary utopias. There is, however, no formal discussion of the consumers' coöperative movement or of the general question of economic planning under a capitalistic form of organization. In evaluating soviet communism, fascism, and national socialism the economic and social aspects are in each instance discussed in separate chapters. This arrangement makes the book more readable, and should prove of distinct advantage in classroom discussion.

In the opinion of the reviewer the book has one serious weakness. This consists in the omission of any adequate analysis or evaluation of our own form of economic organization. It would seem that a comparative study of modern economic systems, prepared primarily for American students, might well include a detailed account of the theory, evolution, and accomplishments of the system of private capitalism. It should be noted, however, that this criticism applies with equal force to various other books of this type.

In conclusion it should be said that the merits of this volume far outweigh its shortcomings. The author has exercised care in selection of material and in distribution of emphasis, and has successfully avoided both excessive factual detail and over-refinement of theory. For use as a text, the book should prove especially satisfactory for college courses at the junior or senior level.

J. E. MOFFAT

Productivity, wages, and national income. Pamph. no. 23. (Washington: Brookings Inst. 1940. Pp. 21.)

Economic History and Geography

Government and Economic Life: Development and Current Issues of American Public Policy. Vol. II. By LEVERETT S. LYON and VICTOR ABRAMSON with the collaboration of CHARLES L. DEARING, FRANK A. FETTER, CHARLES O. HARDY, PAUL T. HOMAN, BEN W. LEWIS, EDWIN G. NOURSE and ELEANOR POLAND. (Washington: Brookings Institution. 1940. Pp. vii-xi, 521-1301. $3.50.)

The first, separately published volume of this two-volume work dealt with governmental implementation and regulation of private enterprise in the United States generally. This second and physically heftier volume deals first with special cases of such governmental activity, as limited by the economic scope of the implementation and regulation (in the cases of agriculture, bituminous coal, petroleum and natural gas and food and drugs) and as limited by its duration (in the cases of the National Recovery Administration and the American participation in the World War). Then it deals with the government as a producer of final goods and services, treating this ancient phenomenon analytically and also devoting special attention to its rapid extension in recent years through activities designed to provide public relief and social security. Combined the two volumes are, as stated in the preface to the first, "designed to analyze the relationship of government to economic life as a whole in terms of fundamental economic and social functions and fundamental governmental activities."

It is possible to make something of a case that the two volumes do not quite complete the very ambitious task set for them. There seem to be some omissions of factual material essential to its fulfillment (for example, almost no discussion of taxation—certainly one of the most fundamental of governmental activities); and there is a marked shortage of trenchant and illuminating analysis of the fundamental conflicts of social and economic interests which animate relations between government and private enterprise. The effort to avoid the passing of judgments on the wisdom of the policies being treated may well contribute to the latter shortcoming.

However, much more remarkable than the shortcomings of the volumes is the large part of the vast domain covered by relations between government and economic life which they manage successfully to encompass and give decidedly enlightening as well as balanced and impartial presentation in only 1301 pages. Because of possible failure of their authors to condense successfully, the general designers of the volumes ran heavy risks of coming out with something more pretentious than a handbook of government and business but something very little more useful. These risks, however, have been overcome with extraordinary success, particularly in this second volume. For example, in dealing with public utilities—a field of which this reviewer has some special knowledge—Mr. Lewis has attained the effect of positive intellectual originality, no doubt authentic, by packing into 129

comprehensively illuminating pages a chronicle that is customarily told in five to ten times as many. While it is particularly notable, his is not an isolated case of condensation involving economy of words but not of ideas and information.

Also by their general arrangement the volumes illuminate their subject matter in an unusual degree. The arrangement makes a sort of declaration of independence from the legalistic approach to government control of economic activity and groups cases of such control (agriculture with public utilities, for example) according to the economic significance of the regulation rather than such considerations as the opinions of lawyers as to whether or not this or that enterprise is "affected with a public interest" or strictly private, etc. In addition, the second volume, as was true of the first, brings up to date—*i.e.*, up to the date of publication—and into clearer focus than is customarily available, ranges of governmental dealings with economic life which have been greatly expanded in recent years. Important contributions of this type are the chapters on "Agriculture" by Mr. Nourse and that on "Public relief" by Mr. Homan.

In the light of current developments it is mischance that the part of this second volume dealing with war and preparation for war as the occasion for special governmental treatment of private enterprise, which occupies 34 pages, is not even more extensively treated, relatively and absolutely. This fact suggests the desirability of periodic supplements to these two basic volumes which might, in addition to filling present gaps, keep the moving chronicle—the very fast moving chronicle—of the development of current issues of American public policy in the relations of government to economic life relatively up to date. In their emphasis upon economic reality rather than legal forms these volumes have provided a singularly useful framework for such a continuing effort. So far as this reviewer's technical competence permits him to judge of the work of a considerable company of authors whose expert knowledge far exceeds that of any individual, they have also clothed much of the structure effectively even if generally with a depressing harshness so far as literary style is concerned.

DEXTER M. KEEZER

Reed College

A Hundred Years of Economic Development in Great Britain. By G. P. JONES and A. G. POOL. (New York: Macmillan. 1940. Pp. 420. $4.50.)

As its title states, this is a textbook in the economic history of Great Britain during the great century of material progress ending in 1939. It is "concerned broadly with changes in the methods of producing wealth and distributing goods and services, and in the types of organization and forms of association developed for those purposes, in what appear to be the more important industries and trades." The authors hope that the work will,

"besides serving as a guide to the general reader, be of use to undergraduates as a preliminary to the study of Dr. Clapham's work"—the monumental *Economic History of Modern Britain.* The first section deals with economic developments from 1837 to 1875, the second with those from 1875 to 1914, and the final one with those from 1914 to 1939.

The work is heavily, not to say profusely, documented, having approximately 350 footnote references in part 1 alone. In addition, there is a wealth of statistical evidence in the form of over 60 charts and tables, all of which are enlightening, and many of which must be the products of hard digging, if not downright drudgery. The fact that they are nowhere listed for speedy and convenient reference is an unnecessary irritation to the reader. Finally, approximately 275 documents and volumes are listed according to subject matter in a well balanced and carefully chosen bibliography.

Not infrequently writers in economic history concentrate too exclusively on the particular subject in hand. Professors Jones and Pool have made no such mistake. Britain's rise to industrial supremacy, the challenge of later arrivals on the scene, and her losing struggle to maintain her position of priority are all dispassionately described against an economic background world-wide in extent. The resultant picture is a clear portrayal of her position in the rapidly changing world which confronts her today. Too often also, general works in economic history tend to "peter out" as they approach the present day, leaving the reader more or less mystified concerning the contemporary situation. This work, however, is as detailed in its description and analysis of the most recent developments as of the earlier period, and thus makes a noteworthy contribution to the literature in the field.

It seems to the reviewer that the period 1914 to 1939 might better have been broken into two periods, the break coming in 1931. Although postwar Britain never fully returned to the Cobdenism of the nineteenth century, she was laissez-faire at heart until 1931. That date marks a significant turning-point in British economic and political history, and the present war has but accentuated the change which began at that time. Even the most conservative today can scarcely visualize a return to the pre-intervention era. Such a marked amount of change in so short a time is nothing less than revolutionary. The economic Britain of the 1920's was much more closely akin to the Britain of 1914 than to that of the late 1930's. But this is perhaps a minor point of criticism, for the authors are fully aware of the changes that have taken place even though they have not emphasized the demarcation. Beyond question, the work is a much-needed addition to the literature of the economic history of Britain during the last hundred years.

LORNE T. MORGAN

University of Toronto

Rome and Italy of the Empire. By TENNEY FRANK. An Economic Survey of Ancient Rome, Vol. V. (Baltimore: Johns Hopkins Press. 1940. Pp. xvi, 445. $5.75, with General Index to Vols. I-V.)

This volume, edited by Dr. Helen H. Loane and Dr. Evelyn H. Clift from the manuscript left by Professor Frank at his untimely death in April, 1939, supplemented by material from his notes and his lectures delivered as George Eastman Visiting Professor at Oxford, completes the *Economic Survey of Ancient Rome.* The series, planned and edited by Professor Frank, constitutes a fine memorial to his sound scholarship and his tireless energy. For specialists in ancient history and students of economic history in general the *Survey* constitutes a collection of materials of the highest importance. However one may challenge the interpretations offered, the sources are there, enabling students to check the conclusions of the editors and to reach independent judgments of their own. No writer on Roman economic history for a long time to come will be able to do without the aid of this work.

The present volume deals with economic developments in Italy between the foundation of the Principate by Augustus in 27 B.C. and the death of Severus Alexander in 235 A.D. Chapters 1-3 give a general survey of this period largely from the point of view of the public finances; chapters 4-9 deal with special topics; municipal finance, regional conditions, agriculture in the first century, industry, trade and commerce, with special treatments of Rome, Ostia and Pompeii. An epilogue expresses Frank's views on the economic decay of the Roman world. He was far too wise to seek a single explanation for the collapse of the Roman Empire, but he feels that the economic decline of Italy which set in during the second century was a strong contributing factor. Nevertheless, he is somewhat at a loss to account for the decay of Italian agriculture. Frank rightly discounts the effects of the alleged outflow of precious metals to the East, since we now know that the export of money came to be controlled. More significant is his conclusion that a "fatal blow" was dealt to the Empire by the great confiscations of Septimius Severus and the corresponding extension of the imperial domains which led, he believes, to the development of agricultural serfdom. Again he is right in rejecting the interpretation of the civil wars of the third century as a movement of an oppressed peasantry against a municipal middle class. But he fails to take account of the effects of the increasing cost of government as a factor in the ruin of agriculture and business enterprise in the provinces.

An appendix by Miss Elsa Graser gives an improved text and a translation of Diocletian's Edict of Prices of 301 A.D., and there is both a bibliography and an index of this volume.

A. E. R. BOAK

University of Michigan

NEW BOOKS

CARR, E. H. *The 20 years' crisis, 1919-1939.* (London: Macmillan. 1939. Pp. xv, 313. 10s. 6d.)

DARBY, H. C. *The draining of the fens.* (Cambridge, England: Cambridge Univ. Press. 1940. Pp. xix, 312. 12s. 6d.)

———. *The medieval fenland.* (Cambridge, England: Cambridge Univ. Press. 1940. Pp. xvii, 200. 21s.)

These volumes mark the completion of studies which have already produced a number of articles in periodicals; but neither the individual articles nor the somewhat more general survey in the *Historical Geography of England before 1800* can give the reader any adequate impression of the significance and quality of this comprehensive study of the fens from Domesday to the present time. Although there is an extensive special literature on the various problems of the fens, there has been no careful appraisal of the social and economic history of the fens. Mr. Darby's study not only throws a great deal of light into many dark places, but also demonstrates the need of approaching history as a continuous sequence of relatively small changes.

No single historical problem could illustrate more perfectly the dangers of the over-simplification and the over-generalization that creep into textbooks and general histories. Careful geographical analysis makes this long complex process manageable and understandable. We must recognize the fundamental distinctions between the peat fen and the silt fen; the different sequence of drainage operations, and the differing objectives and consequences. The drainage of the silt fen began at an early date in the Middle Ages and furnished a basis for great economic prosperity over wide areas. The great operations of the restoration were designed to drain the peat fen, with the uniform result of profound changes in the level of the ground through shrinkage of the peat. By the late eighteenth century the level of the peat fen had fallen below the level of the silt area which lay between the peat and the sea. The success of drainage, thus, made necessary more powerful pumping and drastic revisions of channels and outflows. Unfortunately, the general historian has been too largely preoccupied with the peat fen, and has in many ways failed to understand the history of the area as a whole. The medieval improvements have been underestimated. The character and permanence of the drainage work of the restoration has been misjudged. It failed of being permanent, not because of engineering or technical inadequacy, but because drainage inevitably transformed the condition of the past itself.

ABBOTT PAYSON USHER

DEWEY, T. E. *The case against the New Deal.* (New York: Harper. 1940. Pp. 173. $1.50.)

EINZIG, P. *World finance, 1939-1940.* (New York: Macmillan. 1940. Pp. xvi, 271. $2.75.)

HAAS, W. H., editor. *The American empire: a study of the outlying territories of the United States.* (Chicago: Univ. of Chicago Press. 1940. Pp. xi, 408. $4.)

HANNINGTON, W. *Industrial history in wartime.* (London: Lawrence and Wishart. 1940. 2s.)

HILL, H. and AGAR, H. *Beyond German victory.* (New York: Reynal and Hitchcock. 1940. Pp. vii, 117. $1.)

HOLCOMBE, A. N. *The middle classes in American politics.* (Cambridge: Harvard Univ. Press. 1940. Pp. vi, 304. $2.50.)

HOWARD, G. K. *America and a new world order.* (New York: Scribner's. 1940. Pp. 121. $2.)

HUBERMAN, L. *America, Incorporated: recent economic history of the United States.* (New York: Viking. 1940. Pp. 259. $2.75.)

JACKSON, D. K., editor. *American studies in honor of William Kenneth Boyd.* (Durham: Duke Univ. Press. 1940. Pp. ix, 377. $4.)

By members of the Americana Club of Duke University. Contains eight contributions, among which are "The political economy of Jefferson, Madison and Adams," by Joseph J. Spengler; "Ante-Bellum Cincinnati and its southern trade," by William A. Mabry; and "The natural history of agricultural labor in the South," by Edgar T. Thompson.

KLIMM, L. E., STARKEY, O. P. and HALL, N. F. *Introductory economic geography.* 2nd ed. (New York: Harcourt Brace. 1940. Pp. x, 501. $4.25.)

This college text has been carefully revised throughout, but the same general format and highly desirable multiple approach have been retained. Much of the introductory section has been rewritten to add illustrations and improve the exposition. The following 80 pages on factors of physical environment show some rearrangement and added material on meteorology. Part 3 contains 150 pages on foods, raw materials, and fuels. Part 4 on the geography of commerce and manufacturing has been supplemented by two chapters on some typical American manufacturing industries. In the last 150 pages presenting the regional viewpoint, the material on South America has been expanded.

Statistical material has been brought up to 1937 or 1938 and trade figures have been revised from single-year to multiple-year averages. The abundant diagrams have been culled, supplemented, and redrawn to improve student comprehension.

ROBERT B. PETTENGILL

KNOOP, D. and JONES, G. P. *A short history of freemasonry to 1730.* (Manchester: Manchester Univ. Press. 1940. Pp. ix, 148. 5s.)

LUMPKIN, K. D. *The South in progress.* (New York: Internat. Pubs. 1940. Pp. viii, 256. $2.50.)

MIRKOWICH, N. *Privreda italijanskog fašizma (Economics of Italian fascism).* (Beograd: Stamparija "SOKO." Author: Univ. of California, Berkeley. 1940. Pp. 223.)

Contains a 7-page summary in English.

NEF, J. U. *Industry and government in France and England, 1540-1640.* Memoirs of Am. Philosophical Soc., vol. 15. (Philadelphia: Am Philosophical Soc. 1940. Pp. 172. $2.)

POL, H. *Suicide of a democracy.* Translated by HEINZ NORDEN and RUTH NORDEN. (New York: Reynal and Hitchcock. 1940. Pp. xii, 296. $2.50.)

ROBBINS, L. *The economic causes of war.* (London: Jonathan Cape. 1939. Pp. 124. 5s.)

SMITH, J. R. and PHILLIPS, M. O. *North America: its people and the resources, development, and prospects of the continent as the home of man.* 2nd ed. (New York: Harcourt Brace. 1940. Pp. xiii, 1008.)

STOLPER, G. *German economy, 1870-1940: issues and trends.* (New York: Reynal and Hitchcock. 1940. Pp. xx, 295. $3.)

SUMNER, W. G. *Folkways: a study of the sociological importance of usages, manners, customs, mores, and morals.* (Boston: Ginn. 1940. Pp. xiv, 692. $4.)

THOMPSON, R. T. *Colonel James Neilson: a business man of the early machine age in New Jersey, 1784-1862.* (New Brunswick: Rutgers Univ. Press. 1940. Pp. xiii, 359. $3.75.)

WALLACE, H. A. *The American choice.* (New York: Reynal and Hitchcock. 1940. Pp. 145. $1.)

WHITBECK, R. H., and others. *Economic geography of South America.* 3rd ed. (New York: McGraw-Hill. 1940. Pp. 480. $3.50.)

The economic almanac for 1940: a handbook of useful facts about business, labor and government in the United States and other areas. (New York: Nat. Industrial Conf. Board. 1940. Pp. x, 384. $5.)

The first issue of a publication designed to appear annually.

Guide to the material in the National Archives. Pub. no. 14. (Washington: Supt. Docs. 1940. Pp. xviii, 303. 70c.)

Japan: the thirty-ninth financial and economic annual, 1939. (Tokyo: Govt. Printing Office. 1940. Pp. 271. Yen 1.80.)

The Kress Library of Business and Economics: catalogue covering material published through 1776 with data upon cognate items in other Harvard libraries. (Boston: Baker Library, Harvard Grad. School of Bus. Admin. 1940. Pp. x, 414. $5.)

An extensive bibliography covering 7,279 items of books and pamphlets published through 1776.

Schweizerische Bibliographie für Statistik und Volkswirtschaft, 1939/40. 3 Jhrg. (Bern: Schweiz. Gesellschaft f. Statistik und Volkswirtschaft. 1940. Pp. xvi, 130.)

Agriculture, Mining, Forestry, and Fisheries

Why Farmers Are Poor: The Agricultural Crisis in the United States. By ANNA ROCHESTER. (New York: Internat. Pubs. 1940. Pp. 317. $2.75.)

This volume will take a deserved place on the shelf of books well-nigh indispensable to agricultural economists.

The comparative economics of agriculture is an increasingly complex subject, but any practitioner in the field can offer a multitude of reasons why American farmers are poor. The United States land supply was taken up as virtually free goods and was recapitalized at higher values with every shift from frontier farming to the commercial production of staple wheat, tobacco, cotton, and livestock products for the apparently unlimited European markets. With vanishing export markets and eroding soil resources, today's farmers carry the burden of this over-expanded capitalization in the form of interest, rents and mortgage charges with no possibility of again realizing on increased real estate values.

In industry the form of economic organization gears production close to effective market demand; but in agriculture not even drastic govern-

ment intervention has been able to bring supply and demand into such ideal alignment. Moreover the pressure of an increasing farm population on the land supply and available markets has increased the output of agricultural products in a way that is unknown in the pressure of the industrial population on industrial output. This helps to explain the low incomes of small owners, tenants, croppers, farm laborers, as well as those of unpaid family labor of farm owners as contrasted with incomes of large owners who have secured some of the gains of mechanization. To these trends must be added the tendency of the processors and distributors of agricultural products, such as cigarette manufacturers, canners, bakers, food and milk distributors and processors to control their output in relation to price regardless of the cost of production borne by the purveyors of the raw materials.

All these matters and more make for a complicated economic analysis which Anna Rochester handles with neatness and dispatch. She shows the interdependence of agriculture and industry as parts of our capitalist economy, demonstrates the increase of large farms in each major region at the expense of small farms and traces the growth of capitalism in agriculture through increased capital, increased mechanization and increased use of hired labor. The development of different classes in American agriculture is shown in the growth of farm laborers, migrant and casual, the increase in tenancy and sharecroppers, the crowding out of small farmers and the increased mortgage debt of middle farmers. The statistical analysis here represents the best use of the figures on types of farming and trends in size of farms that the reviewer has seen. The customary account of the loss of export markets is given; and a closely reasoned analysis of farmer's prices *versus* processor's prices is presented in the livestock and dairy industry.

Back of the farmer's price problem is seen the expanding volume of agricultural output and the release of population from the land with increasing mechanization. Incidentally the statement that "the world has land enough to produce, with the methods of scientific agriculture, an indefinitely expanding volume of grain and textiles and fruit and meat and milk" seems somewhat rash to this reviewer.

The author writes from a Marxist basis but her pessimistic view of our agriculture is in an economic tradition that has already become orthodox. Except for occasional references to surplus value, finance capitalism, monopolistic pressures, and the desirability of farmer-labor coöperation, the particular bias of the Labor Research Association is not too evident. The writer suggests that some immediate easing of the situation is possible if the profits of processors and distributors are limited. Miss Rochester discusses the New Deal; but, apart from its achievements in providing cheaper credit, she doubts if it has offered much permanent improvement.

While exceptions can be taken to certain views advanced, this is an

able book in which polemics, Marxist or otherwise, are subordinated to rigorous economic analysis. Further plans for improving the position of American agriculture can well begin on the analysis here presented.

RUPERT B. VANCE

University of North Carolina

World Wheat Planning and Economic Planning in General. By PAUL DE HEVESY. (New York and London: Oxford Univ. Press. 1940. Pp. xiv, 912. $12.00.)

The author, a Hungarian diplomat of wide experience, has long been an assiduous student of wheat. Here he presents the fruit of many years of intelligent labor, including five devoted specifically to this book. He has drawn upon the extensive literature on the world wheat situation, secured the coöperation of other experienced students, and set forth a reasoned plan of international action. Such a work commands respect, deserves study, and calls for more extensive expert discussion than can be attempted in a brief review of so ponderous a volume.

The core of the book, in parts 1 and 2, is by no means formidable. The three introductory chapters (pp. 1-77) discuss the world wheat problem. The next six (pp. 78-161) outline the proposal for a new international wheat agreement and explain how the author thinks it would work. The next five (pp. 162-320) discuss relevant economic, political, and social matters—the competitive system, basic commodities and the economic trend, the issues involved in such international planning, and the future of agriculture. Though varying considerably in depth and penetration, these chapters are all well worth reading.

The next 580 pages of the work constitute a usable body of valuable reference material, for which many will be grateful. The bulky part 3 (pp. 323-694) comprises brief reviews of the agricultural position and recent agricultural policies, with special reference to wheat, in 47 individual countries. The 56 appendices (pp. 697-902) include convenient compilations of voluminous statistics, many of which are on interleaved tables; computations based upon these; other relevant information, such as on weights and measures, the wheat calendar, and import duties; selected documents; and brief essays on many points. Finally, the book contains three indexes—by names, countries, and subjects.

The immediate objective of the proposed agreement is to keep aggregate export offers to European importing countries annually within the aggregate requirements of those countries, with a view to eliminating more or less cutthroat competition and establishing a more or less stable equilibrium price in the markets concerned. Exporting countries would be assigned percentage quotas of the estimated total; and these would be implemented by *negotiable* certificates (issued by an International Wheat Board) which would have to accompany all wheat or flour shipped into a European

country. De Hevesy specifically excludes provision for a minimum price, for which he had argued as early as May, 1932, and in a previous work (*Le Problème Mondial du Blé*) published in 1934. He criticizes (pp. 39-40) this and other features of the draft agreement that was brought nearly to the point of adoption in August, 1939.

The outcome of the present war may largely determine what kind of world we shall live in for some years to come, and one cannot safely predict that international commodity agreements of any such character will be within the scope of post-war practicalities. Nevertheless, efforts to construct a practical plan of international regulation, to project its probable operation, and to take into account relevant influences and prospective repercussions, constitute a significant exercise. Regardless of the merits of de Hevesy's proposal for the pre-war or the post-war world, his presentation has many virtues. If his procedure were applied in more instances of possible economic planning, costly mistakes might be avoided and more consistent progress made.

To say that the author has advanced the thinking on the subject is not to say that his scheme would work and work well. Ample experience shows that accurate forecasting of Europe's import "requirements" for a year ahead is impossible in August. Difficulties that would certainly arise if the forecast were too high or too low are inadequately considered. Experience with control schemes applied to other commodities, and the possibility that this one might still further reduce international trade in wheat, are barely touched upon. The reviewer finds reason to doubt whether the degree of price stability sought would be attained, to say nothing of "establishing and/or maintaining a price that is reasonable to both producers and consumers" (p. 119).

Achievement of this objective, however, would by no means insure acceptable prices and would leave large problems unsolved within the several exporting and importing countries. If the "world wheat problem" were in some degree simplified thereby, as de Hevesy perhaps rightly believes, its "solution" would still require national actions in broad harmony with the international action. Some possibilities of this sort are discussed.

Without attempting to check the author's voluminous data, to scrutinize all his statements for possible errors of commission and omission, or to subject his plan to critical appraisal, the reviewer commends this careful, realistic work as deserving serious attention from economists and social engineers. The Oxford University Press and Humphrey Milford deserve congratulations on the admirable format and printing of the book, which readers will appreciate even if they do not analyze it.

J. S. Davis

Food Research Institute
Stanford University

NEW BOOKS

ACKERMAN, J. and NORTON, L. J. *Factors affecting success of farm loans: a study of lending experience in seven counties in East-Central Illinois, 1917-1933.* Bull. 468. (Urbana: Univ. of Illinois Agric. Exp. Sta. 1940. Pp. 69.)

BACON, L. B. and SCHLOEMER, F. C. *World trade in agricultural products: its growth; its crisis; and the new trade policies.* (Rome: Internat. Inst. of Agric. 1940. Pp. xix, 1102. L. 60.)

BARKER, P. W. *Rubber: history, production, and manufacture.* Trade promotion ser. no. 209. (Washington: Supt. Docs. 1940. Pp. vi, 47. 10c.)

BERCAW, L. O., compiler. *The dairy industry in the United States: selected references on the economic aspects of the industry.* Econ. lib. list no. 11. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. 59.)

————., compiler. *Relocation of farm families: selected references on settler relocation.* Econ. lib. list no. 14. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. 46.)

BRANDT, K. *Whale oil: an economic analysis.* Fats and oils stud. no. 7. (Stanford University, Calif.: Food Research Inst. 1940. Pp. xi, 264. $3.)

"Whale oil is not as remote from the sphere of agricultural fats as first thought may suggest. In the United States it has recently become the center of the struggle for tariff protection and support of prices for domestic oils and fats. In England and Germany it competes directly with agricultural fats from domesticated animals and oil-bearing plants."

ELY, R. T. and WEHRWEIN, G. S. *Land economics.* (New York: Macmillan. 1940. Pp. xiii, 512. $4.)

Students of land economics may be confused by this new book of the same title and by the same authors as earlier books. In the words of the authors, "The content and arrangement of the subject matter of the *Land Economics* are the outgrowth of twenty years' experience in presentation and teaching. In 1922 three volumes were published in a mimeographed edition under the general title, *Outlines of Land Economics;* Volume I, *Characteristics and Classification of Land,* Volume II, *Costs and Income in Land Utilization,* and Volume III, *Land Policies,* by Richard T. Ely, assisted by Mary L. Shine and George S. Wehrwein. In 1928 and again in 1931 the subject matter was revised and rearranged and published in a single volume—*Land Economics,* by Richard T. Ely and George S. Wehrwein."

Land economics is defined "as the science which deals with the utilization of the earth's surface, or space, as conditioned by property and other institutions and which includes the use of natural forces and productive powers above or below that space over which the owner has property rights." In keeping with this definition the presentation begins with a discussion of the relation of land and population, followed by chapters on land as nature, land as space, land as property, and the economics of land utilization. Approximately the latter two-thirds of the book is descriptive and analytical of the various types of land and natural resources.

Physical space is the only indestructible characteristic of land in general. Physical space becomes economic space as it is needed for human use. Economic space may be increased or decreased by transportation or other developments. Consequently, the conservation of economic land and of natural resources is of great significance.

The latter two-thirds of the book will be of great interest to those concerned with various conservation movements and problems. Attention is called to the difference between the total physical quantity of a resource, such as oil, and the economic supply of that resource. Careful attention to this distinction, as made by the authors, would avoid much of the existing confusion concerning the question of future supplies of various natural resources.

The book is well written and will serve as a ready reference for those who wish information concerning the land and other natural resources of this continent.

W. E. GRIMES

GOTTSEGEN, J. J. *Tobacco: a study of its consumption in the United States.* (New York: Pitman. 1940. Pp. 308. $3.75.)

GRIMES, W. E. and HOLTON, E. L. *Modern agriculture.* Rev. ed. (Boston: Ginn. 1940. Pp. 655. $1.72.)

HANNAY, A. M., compiler. *Price fixing by government in foreign countries, 1926-1939: a selected list of references on direct price fixing of agricultural products by foreign governments.* Agric. econ. bibliog. no. 86. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. viii, 631.)

Over 1,800 entries.

HOWARD, A. *An agricultural testament.* (London and New York: Oxford Univ. Press. 1940. Pp. xv, 253. $1.50.)

MARK, I. *Agrarian conflicts in colonial New York, 1700-1775.* Stud. in hist., econ. and public law no. 469. (New York: Columbia Univ. Press. 1940. Pp. 237. $3.)

MORTENSON, W. P. *Milk distribution as a public utility.* (Chicago: Univ. of Chicago Press. 1940. Pp. xviii, 221. $2.50.)

ROBOTKA, F. and SHEFRIN, F. *Coöperative creameries in the United States.* Ser. on coöperatives no. 14. (Washington: Pan American Union. 1940.)

SHANNON, F. A. *An appraisal of Walter Prescott Webb's The Great Plains: A Study in Institutions and Environment. With comments by Walter Prescott Webb, a panel discussion, and a commentary by Read Bain.* Critiques of res. in the soc. sci., iii. (New York: Soc. Sci. Res. Council. 1940. Pp. xi, 254. $1.)

As indicated in the foreword, "This publication is the third in a series entitled *Critiques of Research in the Social Sciences,* sponsored by the Social Science Research Council through its Committee on Appraisal. The work subjected to review in this instance was first published in 1931. This book is a historical review of the settlement and development of the Great Plains, in which the author endeavors to appraise contributing factors. It was received favorably by reviewers and given prominent mention in some lists of outstanding books. The publication under review includes an appraisal of Webb's book by Fred A. Shannon, comments on his criticism by Professor Webb, the discussion at the conference called to consider the appraisal, and a commentary on the conference by Read Bain, its *rapporteur.*

One impression gained from a review of this appraisal is that the author in the book under consideration at times fell into the error of making generalizations which were broader and more sweeping than warranted by supporting material. The appraiser did an effective job of locating weak spots in the author's armor but seemingly went rather far in some instances in picking the study to pieces. The reviewer, however, feels that there was a tendency to devote too much time to relatively minor points and not enough to basic con-

siderations. Professor Bain's commentary provides an excellent summary of the points developed.

This publication suggests some lessons which might well be pondered carefully by those engaged in research and writing. One is the reminder of the importance of meticulous care in arriving at conclusions and in providing adequate support for them. Another is that authors need to thicken their hides to make them less sensitive to the barbs of critical reviewers.

O. B. JESNESS

TASSINARI, G. *Ten years of integral land-reclamation under the Mussolini act.* (New York: Italian Lib. of Information. Pp. 165. $1.50.)

TAYLOR, P. S. *Adrift on the land.* Pub. affairs pamph. no. 42. (New York: Pub. Affairs Committee. 1940. Pp. 31. 10c.)

Illustrated with pictures from the Twentieth Century Fox film, *The Grapes of Wrath,* a lithograph by Thomas Benton, and photographs from the book, *An American Exodus,* by Dorothea Lange and Dr. Taylor.

YAWORSKI, N., and others. *Technology, employment, and output per man in iron mining.* Rep. no. E-13. (Philadelphia: WPA, Nat. Res. Project. 1940. Pp. xxiii, 264.)

For better rural living: report of coöperative extension work in agriculture and home economics in 1938. (Washington: U. S. Dept. of Agric. Ext. Serv. 1940. Pp. 45. 10c.)

Commodities in industry: the 1940 commodity year book. (New York: Commodity Res. Bur. 1940. Pp. 720. $7.50.)

Economic power: hearings, 76th Cong., 3rd Sess., pursuant to Public Resolution no. 113 (75th Cong.). Part 14. *Petroleum industry, section 1, September 25-30, 1939.* Part 14-A. *Petroleum industry, economic outline and data relating to the petroleum industry, September 25, 1939.* (Washington: Temporary Nat. Econ. Committee. 1940. Pp. 7097-7696; 7697-8145. 75c., each.)

Farm credit act of 1940: hearings, 76th Cong., 3rd Sess., on S. 3509, bill to reduce permanently interest rates on federal land bank borrowers of stock liability; to place the federal land banks on a self-supporting basis; to refund and guarantee the bonds of such banks; to increase functions and responsibilities of national farm-loan associations and county committees of farmers; to provide for adjustment and refinancing of farm-mortgage debts; to limit the institution of foreclosure proceedings and the taking of deficiency judgments; and for other purposes, May 7-June 7, 1940. (Washington: Senate Banking and Currency Committee. 1940. Pp. 297. 30c.)

Memoria correspondiente al año 1939. (Buenos Aires: Junta Reguladora de Vinos. 1940. Pp. 158.)

The national sugar problem: a graphic summary. The position of sugar growers, refiners and consumers under the Sugar acts of 1934 and 1937. (New York: U. S. Cane Sugar Refiners' Assoc. 1940. Pp. 69.)

The Northern Great Plains. (Washington: Nat. Resources Planning Board. 1940. Pp. 44. 10c.)

Oil: Mexico's position. (Mexico: Bur. of Information of the Mexican Govt. 1940. Pp. 13.)

Our national resources: facts and problems. (Washington: Nat. Resources Planning Board. 1940. Pp. 45. 10c.)

Production and consumption of manufactured dairy products. Technical bull. 722. (Washington: U. S. Dept. of Agric. 1940. Pp. 76. 15c.)
Rural zoning and land use planning. County planning ser. no. 7. (Washington: Supt. Docs. 1940. Pp. 10.)
The true facts about the expropriation of the oil companies' properties in Mexico. (Mexico: Govt. of Mexico. 1940. Pp. 271.)
The world agricultural situation in 1938-1939. (Rome: Internat. Inst. of Agric. 1940. Pp. vi, 373. L. 25.)

Manufacturing Industries

The Background and Economics of American Papermaking. By Louis Tillotson Stevenson. (New York: Harper. 1940. Pp. xii, 249. $3.00.)

From 1690, when William Rittenhouse, in partnership with three others, started a mill on Wissahickon Creek in Germantown, Pennsylvania, the industry of American papermaking has been "constantly in a state of flux. New locations, new processes, new materials," writes Mr. Stevenson, "are being developed so frequently that there is no indication of a static condition in sight at the present moment."

In 1866 soda pulp was first manufactured from wood by a corporation near Philadelphia, and the following year the first ground wood pulp came out of the Berkshire hills of Massachusetts. Since then "the tide of newsprint has rolled past Berkshire County into the woods of northern New England, New York, the Lake States, the Pacific Coast States and Canada," and the use of southern pine for kraft has given the South a new industry.

Trade secretivness gave way to monopolies. Partnerships and individual ownerships gave way to corporations and holding companies, until by 1934 twenty organizations controlled almost 45 per cent of the paper making capacity of the United States.

From the passing of the first American Tariff act in 1789 until 1911, paper making grew and developed as a protected industry, with science opening new sources of raw material. Taken as a whole, it may still be said to be protected. In 1911, however, acting on a theory that American forest regrowth could be promoted by curtailing markets for our own forest products, and after the failure to consummate the Canadian Reciprocity act, "the United States gave Canada free entry for 'mechanical and chemical wood pulp and newsprint and other paper . . . valued at not more than four cents per pound.' Thus," declares Mr. Stevenson, "our markets were opened to Canadian newsprint. Those countries which have 'most-favored-nation' clauses in their trade treaties with us were accorded the same treatment. . . . The American market for newsprint and wood pulp thus became a free international market. A hole has been breached in the tariff wall.

The domestic manufacturers of these products must face competition from all other countries producing for export.

"The effect of eliminating the duty on newsprint has been to increase the supplies coming to this market from Canada and other countries and probably to maintain a lower market price for the product than would have prevailed otherwise. The American industry has lost ground in total volume and to a much greater extent in percentage of the market supplied." The author's statement is confined to newsprint, but considering the wood growing possibilities of this country, the paper making industry has never approached its possibilities.

With the newsprint business largely transferred to foreign forest industry, the paper making industry ranked only seventh in 1919 in terms of total invested capital. Thus we have the anomolous situation of a country with vast forest resources, with only 5 per cent of the world's population consuming about 60 per cent of the world's production of paper, and importing a considerable portion of its pulp and two-thirds of its newsprint.

Mr. Stevenson analyzes the factors of production, organization, capital, labor, natural resources, scientific research, cost behavior and social controls. With this before him he concludes that the United States "bids fair to maintain its position as a consumer and gradually to increase its position as a producer of pulp and paper."

Whether he has the whole picture remains to be seen, but compressed within less than 250 pages is a comprehensive record of paper industry economics. The confinements of time and space have too frequently reduced to paragraphs the information that must have been boiled down from volumes. In this the author has performed an invaluable service, which is ably supplemented by a comprehensive bibliography and specific references at the close of each chapter. Because of this the book will no doubt be more valuable to the student of economics than to the general reader.

WILSON COMPTON

National Lumber Manufacturers' Association

NEW BOOKS

BURN, D. L. *The economic history of steelmaking, 1867-1939: a study in competition.* (New York: Macmillan. Cambridge, England: Univ. Press. 1940. Pp. x, 548. $6.50.)

CONCANNON, C. C. and SWIFT, A. H. *Chemical developments abroad, 1939: effect of munitions and preparedness upon chemical production, consumption and foreign trade.* Trade promotion ser. no. 211. (Washington: Supt. Docs. 1940. Pp. vi, 183. 20c.)

MANCHESTER, H. *William Armstrong Fairburn: a factor in human progress.* (New York: Blanchard Press. 1940. Pp. iv, 162.)

OTTE, H. F. *Industrial opportunity in the Tennessee Valley of Northwestern Alabama.* (New York: Columbia Univ. Press. 1940. Pp. x, 177. $2.25.)

Automobile facts and figures. 22nd ed. (Detroit: Automobile Manufacturers Assoc. 1940. Pp. 96.)

Economic power: hearings, 76th Cong., 1st Sess., pursuant to Public Resolution no. 113 (75th Cong.). Part 11. *Construction industry, June 27-July 14, 1939.* (Washington: Temporary Nat. Econ. Committee. 1940. Pp. 4933-5593. 75c.)

Electric power statistics, 1939. (Washington: Federal Power Commission. 25c.)

Transportation and Communication

NEW BOOKS

CRUMBAKER, C. *Transportation and politics: a study of long-and-short-haul policies of Congress and the Interstate Commerce Commission.* Stud. in econ. no. 1. (Eugene, Ore.: Univ. of Oregon. 1940. Pp. v, 169. $1.25.)

DAVIES, E. *The state and the railways.* Research ser. no. 51. (London: Fabian Soc. 1940. Pp. 24. 6d.)

DUDDY, E. A. and REVZAN, D. A. *The use of transportation facilities in the Chicago fruit and vegetable market.* (Chicago: Univ. of Chicago Press. 1940. Pp. ix, 86. $1.)

JOHNSON, E. R., HUEBNER, G. G. and WILSON, G. L. *Transportation: economic principles and practices.* (New York: Appleton-Century. 1940. Pp. xi, 678. $4.)

Though not a mere revision, this book is similar to the authors' *Principles of Transportation* (1929). It emphasizes facilities, services, and business methods, rather than rate-making and government regulation. The discussion, even of regulation, is descriptive rather than analytical in nature. And the various forms of transportation, railroad, air, pipe line, water, and highway, are treated separately in different parts of the volume, rather than together according to functional topic.

The present book differs from the former in the following respects: It is more than 100 pages shorter; about one-third instead of one-fifth of the space is devoted to regulation and public policy; pipe lines are included; and new chapters have been added on the functions of transportation, court review, coördination and consolidation, and national transportation policy.

The material presented is for the most part not new; hence economists will doubtless be chiefly interested in the conclusions drawn by the authors with respect to future public policy. These conclusions center upon the basic assumption set forth in the preface to the effect that "the transportation goal to be sought by the people and Government of the United States is the continuance and expansion of private initiative and enterprise. . . ." Government ownership and operation of the railroads should be avoided (p. 256). The government ought to retire from the water transportation business (p. 501). The policy of huge public expenditures for waterways is open to serious doubts (p. 502). It is to be hoped that private enterprise, with government assistance, will be able to provide an adequate merchant marine (p. 514). Coördination of transportation does not call for government ownership, but will require a modification and strengthening of regulation (pp. 648-651). Regulatory changes needed to promote coördination under private ownership include the removal of obstacles to voluntary railroad consolidation, reënactment of a statutory man-

date as to the level of rates, placing highway transportation on a cost basis, more thorough regulation of water transportation, eventual cessation of subsidies to airways, and centralization of regulation of all forms of transportation in the hands of one authority. Most students of transportation will agree that the foregoing conclusions are generally well considered, although some will object to the formulation of the goal of transport policy and will question the wisdom and need of a statutory mandate for rates. The statement that rates should if possible be made adequate on the average will receive general approval.

Inasmuch as the volume is textual in nature and is addressed first to university students, it should be judged primarily as a text for college courses in transportation. So far as scope, authenticity, balance, "up-to-dateness," and manner of presentation are concerned, it appears to be useful for this purpose. In the opinion of the reviewer, however, there is too much description of services, etc., and not enough of theory and critical analysis of problems.

TRUMAN C. BIGHAM

MANCE, H. O. *The road and rail transport problem.* (New York: Pitman Pub. Corp. 1940. Pp. xvi, 166. $3.)

SANDERSON, A. E. *Wartime control of ocean freight rates in foreign trade: a world survey.* Trade promotion ser. no. 212. (Washington: Supt. Docs. 1940. Pp. iv, 48. 10c.)

Additional report of the Committee on Interstate Commerce, pursuant to S. Res. 17 (74th Cong.), authorizing an investigation of interstate railroads and affiliates with respect to financing, reorganizations, mergers, and certain other matters, railroad combination in the eastern region. Part 4. *1926-1929.* (Washington: Supt. Docs. 1940. Pp. 1955-2835. $1.50.)

Highway users pay their way and more. (Washington: Nat. Highway Users Conf. 1940. Pp. 30.)

Interstate Commerce act, amendment: hearings, 76th Cong., 3rd Sess., on S. 3753, to amend the Interstate Commerce act, as amended, May 29-June 13, 1940. (Washington: Senate Interstate Commerce Committee. 1940. Pp. 196. 20c.)

Investigation of railroads, holding companies, and affiliated companies: additional report of the Committee on Interstate Commerce pursuant to S. Res. 71 (74th Cong.), a resolution authorizing an investigation of interstate railroads and affiliates with respect to financing, reorganizations, mergers, and certain other matters. Parts 4, 7-11. (Washington: Supt. Docs. 1940. Pp. 24; 20; 20; 35; 34.)

Public aids to transportation. Vol. 1. *General comparative analysis, and public aids to scheduled air transportation.* Vol. 2. *Aids to railroads and related subjects.* Vol. 3. *Public aids to transportation by water.* Vol. 4. *Public aids to motor vehicle transportation.* (Washington: Fed. Coördinator of Transportation. 1940; 1938; 1939; 1940. Pp. 171; 316; 330; 317. $2.40, the set.)

Railroads and national defense—some current material. (Washington: Bur. of Ry. Econ. Library. 1940. Pp. 9, mimeographed.)

Trade, Commerce, and Commercial Crises

World Trading Systems: A Study of American and British Commercial Policies. By HENRY J. TASCA. (Paris: Internat. Inst. of Intellectual

Coöp., League of Nations. New York: Columbia Univ. Press. 1939. Pp. 172. $1.50)

The theme of this book is the conflict between the trade policies of regulated and unregulated economies. Germany and Russia furnish illustrations of the first, and the United Kingdom and the United States of the second. The problem is to find whether a mutually advantageous trade can be conducted between countries whose policies are antithetical, both as to aims and as to methods.

The author first discusses the attempts made in American trade agreements to adapt our policy of equality of treatment to the quantitative restrictions and the systems of exchange control employed by various countries with which we have conducted tariff bargaining. When a foreign country imposes quantitative restrictions on its imports, the United States attempts to insist on equal treatment. Formally, we have scored certain successes on this point in our trade agreements. Actually, the author doubts whether the guarantees we have received give us any assurance of getting the share of the trade we should have secured in the absence of restrictions. We have not attempted to use the trade agreements as instruments to force the unfreezing of old credits. He finds that with respect to the exchange control, we have attempted to insist that there should be no blocking of payment for goods imported from the United States, and that exchange control be administered without discrimination. We blacklisted Germany because she would not agree to abandon discrimination in allocating exchange. In general, the only exchange control countries willing to accept our formula were those with whom we have a passive trade balance. (Italy is an exception.)

A case study of the difficulty of adjusting our "free" trading system to a controlled system is furnished in chapter 5 which describes American commercial relations with Germany, 1934-1939. The final decision of the Treasury in March, 1939, to impose countervailing duties generally upon imports from Germany the author takes as proof of the inherent incompatibility of the commercial policies of the two countries. The episode is valuable in showing (a) how large an amount of discretion the Treasury may employ in administering countervailing duties, and (b) the conflict of Treasury policy with that of the State Department. It actually happened that in the summer of 1939 Mr. Hull's advisers were urging Brazil to reject certain German trading policies which Mr. Morganthau's advisers had approved.

The bulk of the book, chapters 6 to 11, is devoted to British policy as shown in trade payment and clearing agreements, 1934-1939. As the result of his study of their provisions, Dr. Tasca finds a fundamental difference between British and American policy. In the control of imports into the

United Kingdom by quotas, the British have recognized that the most-favored-nation principle should be applied. But as regards her *exports,* the United Kingdom has demanded, and secured, from other countries better than equal treatment. In other words, the English, while themselves not discriminating in control of imports against the commerce of any country, have forced other nations to pursue a policy of discrimination in their favor. The result has been the promotion of bilateral rather than multilateral trade.

Another aspect in which British policy differs from American is in the closer integration of financial with trade measures. In the British payments agreements, the transfer of financial obligations due to British creditors takes precedence over current trade obligations. So far has this principle been carried that in some cases exports from England actually have been restricted in the interests of collecting debts. American trade agreements contain no clearing or payment features, partly because our trade balance with most of the countries with which we have negotiated is active, and partly because of Mr. Hull's opposition to the bilateralism to which such arrangements lead.

Writing in August, 1939, Dr. Tasca said, "From the view of the future of commercial relations between nations, it is becoming ever clearer that the world is dividing up into sharply defined commercial policy blocs under the influence of the great commercial powers. In the absence of political upheaval, the question of reconciliation between these blocs must develop an increasing importance and concern for the nations of the world." The political upheaval came a month later. But it has not solved the problem to which he referred.

Dr. Tasca's book deserves to be read and pondered by everyone who is concerned with the economic organization of the world after this war is over. It would tend to dispel the comfortable assumption that, if only the English and the French are victorious, we may expect automatically the abandonment of bilateral policies in Europe and a return to the kind of trading system which Mr. Hull has so loyally supported. War disturbances will tend to exaggerate the tendency toward discriminatory trade practices, and the United States should now be considering how its own policy may be adapted to make it easy, and perhaps profitable, for the winners to bring their policies as rapidly as possible into adjustment with our own.

This is not a perfect book; defects of organization, particularly frequent repetitions, annoy the reader: but it is a more significant book than many which have been more carefully constructed.

PERCY W. BIDWELL

Council on Foreign Relations

NEW BOOKS

BERCAW, L. O., compiler. *State trade barriers: selected references.* Econ. lib. list no. 1 (rev.). (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. 60.)

BRATT, E. C. *Business cycles and forecasting.* Rev. ed. (Chicago: Business Pubs. 1940. Pp. xvi, 814. $4.)

This book is a revised and enlarged edition of a volume published in 1937 so that practically everything said of it in the review of the earlier edition (see *The American Economic Review,* September, 1937, p. 627) applies equally well to this one.

The new edition differs from the old one chiefly in the attention paid to theoretical writers. For example, a single chapter of 15 pages in the old edition was devoted to business-cycle theories. In the new edition three chapters are given to this subject. In the new book the reader will find extended discussions of the theories of Pigou, Fisher, Keynes, Hayek, Schumpeter, and numerous other writers along with a presentation of the opposing theoretical positions. Throughout, the volume teems with footnote references to the work of other authors.

The author's original thesis that the business cycle results from "originating causes" which arise from outside the business system and from "self generating" forces of either a reënforcing or limiting nature is preserved. One cycle differs from another chiefly in the particular originating cause present and the chance combination of self-generating forces at work. Forecasting is accomplished by noting the relative strength of the reënforcing and limiting forces at some given moment.

One of the strong features of the book is that though the author presents a definite method of forecasting, it is not based exclusively upon any one type of business-cycle theory, but is such as to appear convincing regardless of the cycle cult to which a reader may belong.

WILFORD J. EITEMAN

KRAMER, R. L., editor. *Our foreign commerce in peace and war: an account of the status and the characteristics of United States foreign commerce, looking to the future.* Annals, vol. 211. (Philadelphia: Am. Acad. of Pol. and Soc. Sci. 1940. Pp. x, 252. $2.)

KROUT, J. A., editor. *Economic nationalism, trade barriers and the war.* Acad. proc., vol. 19, no. 1. (New York: Acad. of Pol. Sci., Columbia Univ. 1940. Pp. 114. $2.50.)

SPURR, W. A. *Seasonal variations in the economic activities of Japan.* Univ. stud., vol. xl, no. 1. (Lincoln: Univ. of Nebraska. 1940. Pp. ix, 129. $1.50.)

China Vegetable Oil Corporation: trade report for the year 1939. (Hong Kong: China Vegetable Oil Corp. 1940. Pp. vi, 107.)

El comercio exterior argentino en 1939 y 1938 y estadísticas económicas retrospectivas. Bol. no. 225. (Buenos Aires: Dirección Gen. de Estadística de la Nación. 1940. Pp. 296.)

A digest of state laws relating to the problem of interstate trade barriers for states whose legislatures convene in 1940. (Washington: Supt. Docs. 1940.)

Employment, wages and international trade. Stud. and rep. ser. B (econ. conditions) no. 32. (Geneva and Washington: Internat. Labour Office. 1940. Pp. 107. 75c.)

This monograph was prepared by Dr. Robert W. Carr in response to action of the General Body of the I.L.O., instructing that Office "to study the question of what changes had occurred in the foreign trade of the various nations, including both exports and imports, with a view to finding out, first, what changes had occurred in total employment in any country where a significant change in exports and/or imports had taken place and, second, what changes had taken place in the incomes of workers in any such country."

The study is limited to selected industrial nations, partly because unemployment is a problem chiefly of industrial countries and, particularly, because of lack of statistical data for non-industrial countries. Even for the nations studied, statistics as to employment and income of workers pertain almost exclusively to industrial workers.

In the selection of industrial countries, an attempt was made to include those of different types. Those chosen were Germany, Italy, Japan, Great Britain, and the United States. For each of these a comparison is made between changes in foreign trade, employment and labor incomes from 1929 to 1932 and from 1932 to 1936, and, in an attempt to explain the apparent relationship between exports and employment revealed in the comparison, an analysis is made of the effects of international capital movements on prices and production.

The author points out that the indices used in comparing changes in foreign trade, employment and labor incomes of the several countries vary considerably in the degree to which they are comparable. But he believes that they indicate the direction of changes in trends and that a disregard of their statistical deficiencies would not greatly affect the general results obtained.

Some conclusions reached: production is the chief factor determining, through the medium of employment, the aggregate real income of industrial labor; there is a close relationship between changes in the volume of exports of a country and changes in the volume of its total production; this relationship is not dependent entirely upon the proportion of the total production which is exported; production for foreign consumption and production for home consumption are related through the effects on price relationship of international movements, of capital; international movements of capital, gold, and merchandise are affected by trade restrictions; gold flows and international short-term lending affect in large measure the direction and extent of price movements, which in turn govern in large measure the volume of production upon which employment depends; insofar as trade restrictions initiate or stimulate international movements of gold and short-term capital, they also lead to or accentuate fluctuations in employment and in aggregate labor incomes, and insofar as they lead to loss of efficiency in the use of the world's economic resources they obstruct the rise of employment and income; in a greater exchange of goods between countries lie prospects of improving conditions and raising real income of workers in the mutual interest of all economic classes of society and of all countries.

This is a significant and scholarly study. But, while the conclusions tend to confirm an economist's expectations, they can hardly be said to have been conclusively demonstrated or scientifically established by this piece of research with its many limitations.

PAUL S. PEIRCE

Our foreign trade in relation to the war. Rep. of Foreign Commerce Dept. Committee. (Washington: Chamber of Commerce of U. S. 1940. Pp. 17.)

Accounting, Business Methods, Investments and the Exchanges

Public Regulation of Competitive Practices in Business Enterprise. By MYRON W. WATKINS and Others. 3rd ed. (New York: Nat. Industrial Conference Board. 1940. Pp. xxi, 355. $5.00.)

After eleven years the National Industrial Conference Board has given us a third edition of Myron Watkins' study of the work of the Federal Trade Commission. The changes are less extensive than might be expected: Regulation of the sale of securities, having passed under the jurisdiction of the Securities and Exchange Commission, has disappeared from the book. A few pages have been added about the Robinson-Patman act and the Miller-Tydings amendment and a paragraph or two about the Wheeler-Lea act. The section about basing point systems has been enlarged by inclusion of discussions of cross-hauling and phantom freight. A new chapter has been added dealing with regulation by other governmental bodies than the Federal Trade Commission under such statutes as the Food, Drug, and Cosmetic act, various requirements for commodity standards and labeling, and the law against use of the mails to defraud. Passages about some of the older cases have been omitted and discussion of many recent cases has been substituted. Although about one-third of the text is new, the outline and point of view are essentially those of the earlier editions.

The impact of depression, the New Deal, and the world-wide collapse of economic optimism have not been so great upon this book as might have been expected. True, there is no longer the tacit presumption of early editions that except for the Federal Trade Commission we live in a world of laissez faire. Nevertheless, the title continues to cover the entire field of publicly regulated competition although the book contains nothing about the Securities and Exchange Commission, the Federal Power Commission, the Federal Communications Commission, the Maritime Commission, the Civil Aeronautics Authority, or the Government Contracts Board. In some respects, however, the book's point of view has changed. There is new emphasis upon the need for stability and security in our economic system. The administrative tribunal as a regulating device is taken for granted, whereas it was formerly viewed with suspicion. A greatly extended scope for the Commission's proceedings against misrepresentation and deception is viewed with general favor rather than with alarm.

Although the relatively unchanged book reflects the relatively settled character of the Federal Trade Commission itself, the Commission has changed more than the book. The new material is not given the share of emphasis it deserves. The eight new pages about the Robinson-Patman act do not sufficiently reflect the relative present importance of the Commission's proceedings against price discrimination. The six new pages on the Miller-Tydings amendment do not adequately express the problems for

business and government which arise in making vertical price-fixing lawful while prohibiting it horizontally. The discussion of the Wheeler-Lea act is summary, without effort to appraise the breadth of the regulatory field it has opened to the Commission or even to assess the significance of the recently created advertising division. It is unfortunate that the book is a revised edition rather than a new work; for both the changed work of the Commission and the changed environment in which it proceeds call for new interpretations.

CORWIN D. EDWARDS

Washington, D.C.

Corporate Financial Policy. By HARRY G. GUTHMANN and HERBERT E. DOUGALL. (New York: Prentice-Hall. 1940. Pp. xxxii, 795. $5.35, trade; $4.00, school.)

In a field where adequate textbook treatment is an exceedingly difficult task, the authors have steered a middle course between the risks of producing a compendium of ill-digested facts about corporate financial policy, and of writing a personalized exposition of what that policy *ought* to be. Within each chapter the material is carefully organized to suit students' needs. The wide scope of the traditional treatment of corporation finance (which is much more the result of the personal preferences of early writers than a logical pattern) is followed. This must be reluctantly approved by the reviewer. The only successful "short" version of the subject would be one which deliberately omitted many topics, which could be better taught elsewhere. The overlapping of this traditional subject matter with other undergraduate courses is serious—*e.g.*, forms of business organization, business finance, investment banking, the relations of government and business, accounting. Yet one who would try to end this condition by producing a properly streamlined text would not receive a cordial welcome from most present-day instructors of corporation finance. This book nearly convinces the reviewer that the subject can continue to sprawl over a wide area, and still be effectively taught.

Extraordinarily good are the chapters on railroad finance, which is placed in proper perspective with recent railroad history; on mergers and consolidations, where difficult material is given lucid presentation; on holding companies, whose advantages (as well as disadvantages) are fairly presented to students, whom other writers try to convince that the holding company is a device of the devil; and on receivership and reorganization, typically the subject given the weakest treatment by other books in this field. There are good chapters on investment banking, the security exchanges, and short-term financing; but to make full use of them would seem to the reviewer to require diversion of student's time from more important material. This is particularly true of three chapters (18, 19, 20) dealing with

short-term financing. Throughout the book illustrative material from the history of individual companies is skillfully used. Specific, briefly-described instances of a given practice are cited. Long and intricate analyses of laws and judicial pronouncements, anathema to most students, are also absent.

In a book which attains such a high general level of excellence, it is disappointing to find an inadequate treatment of promotion. This should be one of the major topics within the scope of corporation finance, one that does not—like so many of its branches—*really* belong in some other field. The changes in American promoting activity since 1900 seem not to have penetrated into texts, nor is there effort in this or other books to make students understand the wide variety in promoting technique which may exist at any given time. Much material to illustrate this latter truth is now available in the records of the Securities and Exchange Commission. The closely coöperative nature of promotion, involving lawyers, bankers and business leaders in any given situation, is also under-emphasized.

There are other weak spots in the book (notably chapter 23, where "certain financial aspects of corporate growth of a general nature" are presented just as ineffectively as the quoted introductory phrase of the authors unconsciously states), but the general tone and methods are remarkably well sustained throughout. This is of great importance to a reader trying to assimilate principles and data in the confusing brood of topics which corporation finance jealously insists on mothering. Add to this a simple, clear style and we must hail a real achievement in American text writing.

SHAW LIVERMORE

University of Buffalo

NEW BOOKS

ANDERSON, B. M., JR. *The securities market and our financial preparedness for the eventuality of war.* Econ. bull., vol. ii, no. 1. (Los Angeles: Capital Research Co. 1940. Pp. 23.)

Address before California Bankers Association at Del Monte, California, May 23, 1940.

APPEL, J. H. *Growing up with advertising.* (New York: Business Bourse. 1940. Pp. 314. $3.)

BABSON, R. W. *Business barometers and investment.* (New York: Harper. 1940. Pp. xii, 270. $3.)

BACKUS, D. C., and others. *Problems in financing the modern corporation.* Finan. manag. ser. no. 59. (New York: Am. Manag. Assoc. 1940. Pp. 42. 75c.)

BLOCKER, J. G. *Cost accounting.* (New York: McGraw-Hill. 1940. Pp. 719. $4.)

CARSKADON, T. R. *59¢ of your $1—the cost of distribution.* Pamph. no. 44. (New York: Public Affairs Committee. 1940. Pp. 31. 10c.)

COUCHMAN, C. B., and others. *New concepts in accounting and auditing.* Finan. manag. ser. no. 62. (New York: Am. Manag. Assoc. 1940. Pp. 34. 75c.)

DAVIS, R. D. *Industrial organization and management.* (New York: Harper. 1939. Pp. xxii, 636. $4.)

This book is a thorough revision of the author's well received text on *The Principles of Factory Organization and Management* which was published in 1928. Indeed, the revision is so extensive that the new title of the book is fully deserved. This edition differs radically from the earlier one in that a large section of the first part of the book is devoted to an extensive presentation of fundamentals. After presenting a chapter on "The development of modern management," Professor Davis discusses at some length such important fundamental factors as "Basic factors in organization and operation," "Functions and the division of responsibility," and "Organization structure and morale" before he presents the usual topics discussed in texts of this nature. This discussion is thoroughly sound and in accord with the latest thinking on the subject. However, the discussion of fundamentals is on so high a plane that students who approach the study of this subject for the first time may have difficulty in mastering it.

The work under review is so sound and complete that any criticism seems out of order. However, students of organization theory will no doubt disagree with the author on a number of propositions. The present reviewer is brought face to face with the problem as to the proper scope and limitation of a text on this subject. Is it perhaps time that we recognize the principles of functionalization when writing books in this field? Does industrial organization and management mean the organization and management of the production department of an industrial enterprise or the organization and management of all departments? The question is raised because the author discusses plant location, purchasing, office management, personnel management (six chapters), but not finance, marketing, accounting (except cost accounting), legal structure, legal department, etc. To be consistent, all aspects and departments of an industrial enterprise should be discussed, instead of presenting some and omitting others. The fact is that we have reached a point in our knowledge of the organization and management of industrial establishments where we need to confine our discussion in texts to individual departments or functions.

These questions are not intended to detract from the excellence of Professor Davis' book. Many will doubtless find this a most satisfactory textbook and so will give it a hearty welcome.

G. T. SCHWENNING

DOUGLAS, W. O. *Democracy and finance.* Edited by JAMES ALLEN. (New Haven: Yale Univ. 1940. Pp. 315. $3.)

EASTWOOD, R. P. *Sales control by quantitative methods.* (New York: Columbia Univ. Press. 1940. Pp. x, 334. $3.50.)

EVANS, G. H., JR., with BARNETT, G. E. *Principles of investment.* (Boston: Houghton Mifflin. 1940. Pp. vii, 225.)

Although directed primarily to presenting fundamental principles to guide the investor, this book will be of interest to students of investment and of general economics because of its unusual approach and treatment.

Investment falls in the general field of exchange, being one form of exchanging present funds for the expectation of receiving future funds. Uncertainties (external and internal) which account for price (yield) variations, arise from changes in the pure interest rate; variation in kinds of securities and the uncertainties attached to them; differences in the degree of liquidity

(including a concept of "reversibility") ; and differenecs in taxability. Security analysis is an attempt to evaluate the internal uncertainty involved in an individual security. The investor's problem is primarily to build up a portfolio in which the uncertainties of individual securities are so balanced off against each other that the resultant fits the investor's needs.

Problems, interest rate tables, and sample investment portfolios are given in the appendices.

DONALD M. HALLEY

FREDERICK, J. H. *Public warehousing: its organization, economic services and legal aspects.* (New York: Ronald. 1940. Pp. xii, 301. $3.50.)

GRAHAM, B. and DODD, D. L. *Security analysis: principles and technique.* 2nd ed. (New York: McGraw-Hill. 1940. Pp. xiii, 851. $4.)

Like the first edition which appeared in 1934, this is a careful and penetrating study of security analysis and investment policy. As in the first edition, analytical techniques appear to be emphasized somewhat more than investment policy; but those who have studied the earlier work will recognize that the analytical techniques proposed and illustrated are so skillfully blended with interpretative methods as to constitute a coherent treatment of the broad problems of investment policy.

The general framework of the first edition, and most of the material, has been retained in the second edition. Many of the illustrations have been revised to reflect conditions which developed in the years 1934-39; others have been supplanted by more recent and pertinent examples. Recent legislation relating to securities, and the regulations and decisions of federal agencies, particularly those of the Securities and Exchange Commission, are included.

One of the outstanding weaknesses of many revisions of published works is that old material is retained and more recent developments are relegated to footnotes or to positions of subordinate importance in the text. To a slight extent this weakness is apparent in the present work. The second edition is also weighted heavily with illustrations relating to the ten-year period ending in 1932, and for the student or teacher interested in illustrations of recent developments this may be a weakness.

The six years elapsing since the first edition appeared have provided a laboratory test-period which the authors have utilized to test the theories and analytical methods proposed and illustrated in 1934. These theories and methods have withstood the strains of the past six years with conspicuous success.

FRANK P. SMITH

GRAGG, M. T. and BORDEN, N. H. *Merchandise testing as a guide to consumer buying.* Rev. ed. Bus. res. stud. no. 22. (Boston: Harvard Univ. Grad. School of Bus. Admin. 1940. Pp. 84. $1.)

HATFIELD, H. R., SANDERS, T. H., and BURTON, N. L. *Accounting principles and practices: an introductory course.* (Boston: Ginn. 1940. Pp. vi, 599. $3.75.)

HECKERT, J. B. *The analysis and control of distribution costs for sales executives and accountants.* (New York: Ronald. 1940. Pp. xvii, 420. $5.)

Professor Heckert has prepared his book primarily for the practical operating executive and accountant. To this end he emphasizes procedures and methods in detail and from many angles. The book falls in four sections, concerned

in order with cost analysis, cost standards and control, cost reports and government regulation. Four appendices include anti-discrimination statutes and selected cases under the Robinson Patman act. While the section on control would benefit from greater attention to modern control philosophy and methods, the work must be accepted as a much needed, useful contribution to accounting literature.

W. P. FISKE

HOAGLAND, H. E. *Real estate principles.* (New York: McGraw-Hill. 1940. Pp. 511. $4.)

HOLTHAUSEN, D. M., and others. *The volume of consumer instalment credit, 1929-1938.* Bull. 79. (New York: Nat. Bur. of Econ. Research. 1940. Pp. 12.)

JOSEPH, E. S. *Debt and economic stagnation: a proposed remedy.* (New York: Progress Pubs. 1940. Pp. 35.)

LANGSTON, L. A. *Bank accounting practice.* Rev. ed. (New York: Ronald. 1940. Pp. 551. $5.)

MACHLUP, F. *The stock market, credit and capital formation.* Translated from a rev. version of the German ed. by VERA C. SMITH. (New York: Macmillan. 1940. Pp. xii, 416. $5.)

In the revision of this volume (see *Am. Ec. Rev.,* June, 1933, for comment upon first edition) the main argument has not been altered that the securities markets do not absorb credit and capital, and thus deprive industry of capital. The attitude of the author is somewhat more aggressive in dealing with those whose theories contrast sharply with his own. Three new chapters have been added to the book. They deal with: (1) the demand for loans by the stock market; (2) the liquid funds of bearish sellers; and (3) capital gains, savings, and a vicious circle. The latter denies some of the principles of Dr. H. G. Moulton as set forth in *The Formation of Capital.*

The present writer is inclined to be critical of any thesis in which mere mechanical analysis of the processes of the stock market is accepted as sufficient to deduce the general conclusions offered in this volume. When markets are rising, optimism rules people and their decisions are substantially affected; when markets are falling, the consequent pessimism causes all sort of decisions to be made that do affect both the formation of new capital and the employment of old capital. It is hoped that Professor Machlup will soon honor us with a short treatise emphasizing the psychological phases of the problem.

F. F. BURTCHETT

MERRILL, L. *Business change and the salaried employee.* (New York: United Office and Professional Workers of America. 1940. Pp. 20.).

MOONEY, J. D. and REILEY, A. C. *The principles of organization.* (New York: Harper. 1939. Pp. x, 223. $3.)

This volume is a new edition of an earlier work first published in 1931. The subject matter is treated both analytically and historically as it applies to government, the church, the army and industry. Final chapters discuss the administrative problems of modern industry, the labor problem, external problems of industry, and the present challenge to leadership. All interested in efficient accomplishment by large or small groups should profit from this careful study.

W. P. FISKE

NEWMAN, W. H. *Business policies and management.* (Cincinnati: South-Western Pub. Co. 1940. Pp. xii, 644. $4.)

Includes chapters on policies—sales, procurements, personnel, financial; organization; facilities—covering capacity, layout and building construction; tehniques—planning, performance, control.

PATON, W. A. *Recent and prospective developments in accounting theory.* Stud. no. 25. (Boston: Harvard Univ. Grad. School of Bus. Admin. 1940. Pp. iii, 19. $1.)

PLUMMER, W. C. and YOUNG, R. A. *Sales finance companies and their credit practices.* Stud. in consumer instal. finan. no. 2. (New York: Nat. Bur. of Econ. Research. 1940. Pp. 321. $3.)

ROBINSON, O. P. *Retail personnel relations.* (New York: Prentice-Hall. 1940. Pp. xxi, 565. $4.)

SATTGAST, C. R. *The administration of college and university endowments.* Contribs. to educ. no. 808. (New York: Teachers Coll., Columbia Univ. 1940. Pp. vi, 125. $1.85.)

SPECTHRIE, S. W. *Mathematics for the accountant.* (New York: Ronald. 1940. Pp. xvi, 209, loose-leaf. $4.50.)

Investment trusts: hearings, 76th Cong., 3rd Sess., on H. R. 10065, bill to provide for registration and regulation of investment companies and investment advisers, and for other purposes, June 13-14, 1940. (Washington: House Interstate and Foreign Commerce Committee. 1940. Pp. 145. 15c.)

Investment trusts: hearings, 76th Cong., 3rd Sess., on S. 3580 to provide for the registration and regulation of investment companies and investment advisers, and for other purposes. Part 2. *April 12-26, 1940.* (Washington: Senate Banking and Currency Committee. 1940. Pp. 325-1059. 75c.)

Investment trusts and investment companies: report of the Securities and Exchange Commission pursuant to Sec. 30 of Public Utility Holding Company act of 1935. Part 3. *Abuses and deficiencies in the organization and operation of investment trusts and investment companies.* Chaps. 1 and 2. (Washington: Securities and Exch. Commission. 1940. Pp. 798. $1.)

Training solutions of company problems: programs designed for the development of sales personnel. Stud. in personnel policy no. 22. (New York: Nat. Industrial Conf. Board. 1940. Pp. 80.)

Capital and Capitalistic Organization

Corporate Size and Earning Power. By WILLIAM LEONARD CRUM. (Cambridge: Harvard Univ. Press. 1939. Pp. xi, 418. $4.00.)

"The present monograph is not a revised edition of *Corporate Earning Power*" (the author's earlier book), says Professor Crum, but is "a very elaborate examination of a single aspect of corporate earning power." This aspect is the relation between profitableness and size.

Size of what? Not of production unit, because many of the corporations filing income tax returns may have more than one plant each. And not of enterprise in all cases, because since 1934, consolidated corporations have not been allowed to file combined tax returns. What is really measured is the rate of return on stockholders' investment (total book equity) in relation to the size of assets as disclosed by corporate income tax returns.

Except for companies that are subsidiaries of others, the size of assets here used is a measure of the scale of *management operations*. This is perhaps even more important than *productive* or *plant* operations, for the purpose at hand, and so Professor Crum need not have bemoaned the absence of the latter measure quite so much as he does in his carefully qualified introduction.

The findings are to the general effect that size and the rate of earning power, thus viewed, correlate positively—in industry as a whole and in most major groups of industry, particularly in manufacturing. Here (in manufacturing as a whole) companies with assets of from one to five million dollars earn 8.8 per cent upon investment in 1936, while those with capitals of 5 to 10 millions earn 9.26; the 50 million dollar companies earn 9.53 per cent.

Thus large businesses, or at least large corporate units, seem to do better than small. But this is not to say that really "big" business does better than not quite such big business. For Professor Crum's figures also show that the corporations with assets of over 100 million dollars earned at a *lower* rate than any of the five preceding groups in the size scale.

I feel that the significance of this is great, and that Professor Crum does not stress it sufficiently. Moreover, this finding, for the very largest sized groups and available only for 1936, is consistent with the findings of other investigators who have dealt with smaller samples.[1]

For the other sized classes, however, the findings are, on the surface, quite inconsistent with earlier results from smaller samples. That is, they are inconsistent for most of the industrial groups analyzed and consistent for some others. Why this is so the reviewer cannot undertake to say. But with as large masses of data as Professor Crum has here at hand, his findings are not to be gainsaid. To be sure, they relate to the decade of the 1930's, whereas the studies of others have dealt chiefly with the 1920's.

And they concern, for the most part, broad groups of industries. Professor Crum feels that the results would be much the same, generally speaking, if data were available by specific industries and trades rather than for just these broad major groups. Perhaps so. But in the numerous exceptions that would undoubtedly appear, *were* such detailed data available, much could be learned about the economic factors that underlie the phenomena in question. Do the difficulties of organizing and controlling operations in some types of industry almost inevitably make very large size (of the management unit) markedly less efficient than "moderate-large" size? And in other types of industries, do price and market policies as well as produc-

[1] H. B. Summers, *Quart. Jour. of Econ.*, "A Comparison of the Rates of Large-Scale and Small-Scale Industries," May, 1932; also, the present reviewer's, *Industrial Profits in the United States*, Nat. Bur. of Econ. Res., 1934, chapter 5.

tion exigencies necessarily impose a different situation as regards the largest, the next-to-largest, and the middle-sized firms?

These questions we cannot yet answer. If we do answer them more completely some day, it will, however, be very largely because of the careful and elaborate labors of Professor Crum who, by this latest work, shows himself still to be the greatest student of Treasury documents (those annually recondite and terrifying *Statistics of Income* volumes) that we have.

RALPH C. EPSTEIN

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NEW BOOKS

ARNOLD, T. W. *The bottlenecks of business.* (New York: Reynal and Hitchcock. 1940. Pp. xi, 335. $2.50.)

BAUER, H. C., compiler. *An indexed bibliography of the Tennessee Valley Authority.* Suppl. July, 1939-Dec., 1939. (Knoxville, Tenn.: Tenn. Valley Authority. 1940. Pp. 13, mimeographed. Gratis.)

BONBRIGHT, J. C. *Public utilities and the national power policies.* (New York: Columbia Univ. Press. 1940. Pp. vi, 82. $1.25.)

HACKER, L. M. *The triumph of American capitalism: the development of forces in American history to the end of the nineteenth century.* (New York: Simon and Schuster. 1940. Pp. x, 460. $3.)

LIPKOWITZ, I. *Monopoly and big business.* (New York: League for Industrial Democracy. 1940. Pp. 56. 20c.)

LYON, L. C. and ABRAMSON, V. *Government and economic life.* Pamph. no. 22. (Washington: Brookings Inst. 1940. Pp. 66.)

An interpretative summary of the two-volume study under the same title.

Labor and Labor Organizations

Rival Unionism in the United States. By WALTER GALENSON. (Washington: Am. Council on Public Affairs. 1940. Pp. 317. $3.25.)

The split of the labor movement into two hostile camps has placed many employers in an unenviable position. Under the national and state labor relations acts, they must bargain collectively with the union which represents a majority of their employees. Conversely, they become guilty of an unfair labor practice if they bargain with the minority union, after a majority of the employees have designated the rival union as their representative. Frequently, however, the minority union retaliates by calling a strike against the employer, or by picketing his place of business. There is nothing in the labor relations acts which gives the employer any remedy in such a situation.

Inevitably, the employer, or sometimes the majority union, has turned to the courts for protection. There have been a surprisingly large number of cases involving rival union disputes of this character. Many of them antedate the A.F. of L.-C.I.O. split, because rival unionism has always existed in this country, although never as extensively as now.

The courts generally have sought to protect the employer who has made an agreement with one union, which is satisfactory to at least a majority of his employees, against interference by the rival union. In New York, where there have been as many legal actions growing out of rival union disputes as in all other states combined, the Court of Appeals, indeed, developed a doctrine prior to the enactment of the labor relations acts, that minority unions were within their rights in calling strikes, boycotting or picketing employers who had contracted with rival unions.[1] In the trial courts of that state, however, numerous injunctions have continued to be issued against such tactics. The net effect of the doctrine developed by the Court of Appeals, as interpreted by the majority of the trial courts, has been that "the ground for granting relief merely shifts from the no longer available procurement of contract breach to readily found illegal means." Elsewhere the doctrine of the New York Court of Appeals has been followed only in sporadic instances and is contrary to the overwhelming weight of opinion of the courts of final jurisdiction. Since the labor relations acts have made it unlawful for employers to bargain collectively with minority unions where a majority has secured or is demanding recognition," the incongruity of permitting picketing, on the one hand, and of guaranteeing the failure of the picketing to achieve the purpose for which it is instituted" is so apparent that the "hands off" doctrine in rival union disputes has become untenable.

Nevertheless, the author does not favor leaving the protection of employers and majority unions to the courts. Equity judges "generally have little more than a nodding acquaintanceship with labor problems." While conceding "ultimate judicial appeal," the author believes that the best chance for solving "the problems of a new industrial order and the novelties of the modern employer-employee relationship," lies in "a careful shifting of facts by commissions of experts." He would continue present policies represented in the Norris-LaGuardia and National Labor Relations acts, but would supplement the latter by a provision making it an unfair labor practice for a minority union to picket or boycott an employer for one year following the certification of another union as the exclusive bargaining representative of the employees.

This proposal runs counter to the position taken by the American Federation of Labor which at one and the same time wants to continue to make it the duty of the employer to bargain with the majority union and strictly to observe his agreements, while leaving the minority free to bring every sort of pressure, short of violence, to compel the employer to cease dealing with the majority. To others this will seem a very mild proposal, indeed. But whether the remedy suggested is sound or unsound, this first study

[1] Stillwell Theatre *v.* Kaplan, 259 N.Y. 405, 182 N.E. 63 (1932).

of one of the most difficult practical problems in present day labor relations is distinctly worth while. The author seems, literally, to have covered all of the cases arising out of rival union disputes of which published records are available, plus many such cases, particularly in New York City, which are unreported. He has handled both the law and the facts accurately and impartially. In addition, the book contains excellent up-to-date chapters on the Norris-LaGuardia act and the state and national labor relations acts and their functioning. Begun as a doctor's thesis under the direction of Professor Paul F. Brissenden of Columbia University, this is one of the best examples of the possibility of real contributions by economists in the border field between economics and law.

EDWIN E. WITTE

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As Steel Goes, . . .: Unionism in a Basic Industry. By ROBERT R. R. BROOKS. (New Haven: Yale Univ. Press. 1940. Pp. 275. $3.00.)

This volume, the third in a series of interrelated studies of the labor movement by the same author, possesses all those qualities of factual knowledge, intuitive understanding, and good writing which made its predecessors so valuable. The history of the organization in steel is told in detail, and followed by a generous discussion of the union as a going concern, its internal organization, policies, methods, and problems.

Of the questions touched upon I shall mention only a few that seem to me most important. First, union government. It is described as highly centralized. Dues and fees flow to the central office. Bills are paid there. Supplies are purchased there. Reports and questions flow in from the many locals, and advice and instruction flow out. Mr. Brooks believes this organization to be responsible for the efficiency and internal discipline which have brought the union widespread respect among employers.

But he has anxiety. The gifted leadership has come from outside the industry. It has been appointed, not elected from below. He asks whether the purposes of democracy can thus be served. Will not centralized control and appointed leadership develop a fatal dependence of the rank and file upon authority as well as a strong vested interest among officers in the continuance of their own power? We are told that the national officials are cognizant of all this, consider their tenure provisional and are planning to induct the membership into government in 1942. The steps will be watched by enthusiast and sceptic alike.

Mr. Brooks emphasizes that fruitful collective bargaining requires men who are intelligent, informed and coöperative. Such qualities are not produced at will; nor are they conspicuously the product of such a militant environment as has prevailed in the industry in the past. He tells of the

efforts of the union to cultivate these qualities among officers and men. He tells less of the need for similar training among representatives of the companies, who frequently frustrate the plans of top management to deal fairly with the union. I wish Mr. Brooks had told us more of this obstacle to collective bargaining, and more of the efforts of such companies as Jones and Laughlin to do something about it.

Most important among the union's policies are those provoked by unemployment. Seniority and plans to control the rate of technological change fall into this category. SWOC urges seniority in all contracts. Problems ensue for management and union alike. Management fears the gradual ageing of a force that enjoys seniority, and will continue to do so as long as labor costs are a factor of competition. Employers will fight the policy and the union in consequence. As for the union, seniority favors the older as compared with the younger men, and the latter may be alienated and join with management to break the union.

But seniority is not the basic problem. Unemployment is. The union we are told has proposed many things. It urges union-management coöperation to devise plans of protection of men displaced by improved technology. The plans are but broadly sketched by Mr. Brooks, doubtless because they are but indistinctly drawn by the parties themselves. More fundamentally, the union proposes large-scale government investment as a means of combating unemployment. Its proposals are evidently predicated upon some such theory of economic development as that put forth recently by the seven Harvard and Tufts economists. Mr. Brooks does not discuss the adequacy or validity of all this. But clearly the union has been encouraged to become a strong factor in pushing public schemes for an enlarged national income. The technical difficulties are well known by economists. Considering these, the political tensions that such plans arouse, and the centralized government of the union, an unwonted issue may result. The SWOC may find itself becoming an instrument by which a contracting industry and economy impose *scarcity* of goods and jobs upon its members rather than the abundance our technology is capable of providing. On this no light is shed.

There are many other questions discussed in this book which cannot be referred to here. But it should be said in conclusion that it is a chronicle, primarily, of a widely significant and heartening movement in these days of declining freedom. Mr. Brooks's devotion to democracy impregnates the whole. It is in this sense that the book is to be well recommended. The economist interested more narrowly in questions of collective bargaining and costs, competition, economic stability, and the cycle will find straw here. But he will for the most part be obliged to make his own bricks.

J. RAYMOND WALSH

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NEW BOOKS

ATTLEE, C. R., and others. *Labour's aims in war and peace.* (London: Lincolns-Prager. 1940. 3s. 6d.)

BAKER, H. *Current policies in personal relations in banks.* Res. rep. ser. no. 61. (Princeton: Princeton Univ. Industrial Rel. Sect. 1940. Pp. 50. $1.)

————., compiler. *Problems and policies in industrial relations in a war economy: a selected, annotated bibliography.* Rev. ed. Rep. no. 60. (Princeton: Princeton Univ. Industrial Rel. Sec. 1940. Pp. 30. 25c.)

CHAMBERLIN, W., compiler. *Industrial relations in wartime Great Britain, 1914-1918: annotated bibliography of materials in the Hoover Library on war, revolution, and peace.* (Stanford University, Calif.: Stanford Univ. Press. 1940. Pp. x, 239. $3.)

EDWARDS, N. *History of the South Wales Miners' Federation.* (London: Lawrence and Wishart. 1939. Pp. 160. 3s. 6d.)

ENGELS, F. *The British labour movement.* (New York: Internat. Pubs. 1940. Pp. 47. 15c.)

FELDMAN, H. *Stabilizing jobs and wages through better business management: a discussion of business plans and techniques to regularize employment and income.* (New York: Harper. 1940. Pp. xv, 334. $3.50.)

FISHER, T. R. *Industrial disputes and federal legislation, with special reference to the railroad, coal, steel and automobile industries in the United States since 1900.* Stud. in hist., econ. and public law no. 467. (New York: Columbia Univ. Press. 1940. Pp. 370. $4.75.)

GAFFEY, J. D. *The productivity of labor in the rubber tire manufacturing industry.* Stud. in hist., econ. and public law no. 472. (New York: Columbia Univ. Press. London: P. S. King. 1940. Pp. 204. $2.50.)

GILL, C. *Unemployment and technological change.* Rep. no. G-7. (Philadelphia: WPA, Nat. Research Project. 1940. Pp. 21.)

"The measure of technological advance is the capacity of the masses to buy the products of technology." The test of the social value of science and invention could not be more tersely expressed than this by the chairman of the Temporary National Economic Committee in recent hearings. Before this committee in April, Corrington Gill and David Weintraub gave testimony on problems attending technological change which the former has summarized in the present report. Corrington Gill was appointed assistant administrator of the WPA and supervisor of the National Research Project, organized in 1935 with David Weintraub as its director to inquire into the extent of recent changes in industrial techniques as a basis for evaluating the effects of these changes on the volume of employment and unemployment. The NRP has already published some sixty-four reports as a result of field studies made by its own staff and by coöperating public and private agencies. More publications are to come.

This summary sketches the nature and effects of recent technological changes which have vastly increased labor productivity without stimulating total production; which with relatively small capital outlays have encouraged large and discouraged small enterprise; which have prompted an annual surge back and forth between farm and industry of three and one-half million dislocated persons; which have caused populations such as those of textile towns and coal regions to be economically stranded and thousands of employable persons chronically unemployed; which have torn from their moorings special groups

of workers such as weavers and railroad employees leaving them unadjusted to other occupations because of the limited transferability of their special skills; which have rendered youths unable to secure first jobs in labor markets that were crowded with experienced job seekers.

Two graphs show striking differences in the relation of industrial production to the labor supply for the ten-year periods of the 1870's, 1890's and 1930's. They point convincing evidence that the unsolved problem of the 1930's was "one of fuller utilization of the productive forces of the nation—natural resources, plant capacity, and labor." Since it appears certain from our experience in the late twenties that this problem "will be recurring even at the best of times," Mr. Gill suggests remedial action that should be undertaken by the federal government during prosperity as well as in periods of depression. His recent book entitled *Wasted Manpower* is largely an elaboration of what is contained in this compact document.

ELIZABETH F. BAKER

GLASSER, C. *Wage differentials: the case of the unskilled.* Stud. in hist., econ., and pub. law no. 476. (New York: Columbia Univ. Press. 1940. Pp. 169. $2.)

HAMBURGER, L. *How nazi Germany has mobilized and controlled labor.* (Washington: Brookings Inst. 1940. Pp. 63. 25c.)

HARRIS, H. *Labor's civil war.* (New York: Knopf. 1940. Pp. 304. $2.50.)

HILL, P. *The unemployment services.* (London: Routledge. 1940. Pp. xiv, 266. 7s. 6d.)

MARIANO, J. H. *The Busch Jewelry Stores labor injunction.* (Boston: Christopher Pub. House. 1940. Pp. 238. $2.50.)

The book is devoted to a minute recital of a relatively unimportant strike in so far as the number of strikers and the industry are concerned—about 320 clerks in a New York chain of jewelry stores. What makes the strike important in labor history is that the picketing, marked by violence, insults and threats to customers and employees remaining at work, caused the issuance of an injunction directing complete cessation of all picketing in spite of the recently enacted New York State law legalizing picketing and forbidding the issuance of injunctions in labor disputes.

The injunction granted by New York Supreme Court Justice Cotillo was sustained by the majority opinion of the Court of Appeals, the highest tribunal in the state. The Court unanimously agreed that the law prevents the courts from enjoining peaceful picketing:

"It was never intended to deprive the Supreme Court (of the State of New York) of jurisdiction to enjoin dangerous, illegal acts which constituted disorderly conduct and breach of the peace. If such was its intent and effect it is to that extent unconstitutional and void."

In voicing his dissent, Judge Lehman held that the injunction should have been issued against unlawful acts committed in connection with the picketing, but should have allowed the union to continue picketing in a peaceful manner.

The majority opinion is now the law of the State of New York. It vests the courts of the state with the power to punish unlawful acts accompanying picketing by enjoining picketing of any kind.

N. I. STONE

MARSH, L. C. *Canadians in and out of work: a survey of economic classes and their relation to the labour market.* McGill Univ. soc. research ser. no. 9. (Toronto: Oxford Univ. Press. 1940. Pp. xx, 503. $3.)

MYERS, J. *Do you know labor?* (Washington: Nat. Home Lib. Found. 1940. Pp. ix, 139. 50c.)

In brief compass and well grounded on facts impartially presented, the author has made available to students and general readers an informative and interesting volume in answer to the question he asks.

Besides drawing upon authoritative sources, the author brings to the questions discussed a wide experience in dealing at first hand with labor problems. Seven years as a labor manager in a manufacturing concern and 15 years' experience as Industrial Secretary of the Federal Council of Churches, during which he investigated labor relations in all parts of the country, enables him to see the problems as employers and employees view them.

Many of the problems have ethical and religious aspects. He believes that a society which stands for democracy and Christianity must recognize that industrial problems arising out of the denial of democratic rights and un-Christian practices are threats to the fundamentals for which we are supposed to stand.

The book traces briefly the evolution from slavery to work for wages, explains the rise of labor organizations, and shows the origins of the controversy between the A.F. of L. and the C.I.O. It discusses the causes of strikes and how to prevent them. It deals with the wage worker's need for legal protection as provided by the National Labor Relations act and other laws. It presents the constructive results obtained by coöperation between employers and employees, by profit-sharing, by consumers' coöperation and by social legislation which protects the rights of employees as citizens and improves their status in a democracy.

Other topics discussed are the development of international labor relationships, the interest of the labor movement in world peace, the status of women and negroes in the labor movement, the development of workers' education, and the relation of the church to the labor movement.

Brief, authoritative and inexpensive, this volume should find wide use among classes and discussion groups. Questions at the end of each chapter provoke discussion. There is an excellent bibliography to guide them.

ARTHUR E. SUFFERN

NEWCOMB, R., MERRILL, C. W. and KIESSLING, R. L. *Employment and income from gold placering by hand methods, 1935-37.* Rep. no. E-14. (Philadelphia: WPA, Nat. Research Project. 1940. Pp. xiv, 142.)

RINCKHOFF, W. A. and RECTOR, H. B. *Handbook of procedure and practices under the National Labor Relations act.* (Cincinnati: Law Research Serv. 1940. Pp. 142. $7.50.)

SAPOSS, D. J. and COOPER, L. *Effective collective bargaining, revised, May, 1940: outline, bibliography, and statements from authorities on the rôle of the written trade agreement.* Res. outline no. 7. (Washington: Nat. Labor Rel. Board, Tech. Serv. Div. 1940. Pp. 33, mimeographed.)

SINGER, H. W. *Unemployment and the unemployed.* (New York: Chemical Pub. Co. 1940. Pp. 152. $2.75.)

WATKINS, G. S. and DODD, P. A. *Labor problems.* 3rd ed. (New York: Crowell. 1940. Pp. xiii, 1128. $3.75.)

WUNDERLICH, F. *Labor under German democracy: arbitration, 1918-1933.* (New York: Soc. Research. 1940. Pp. xiii, 101. $1.)

ZISKIND, D. *One thousand strikes of government employees.* (New York: Columbia Univ. Press. 1940. Pp. 279.)

The right of government employees to engage in strike action in an effort to improve their working conditions has not met with widespread acceptance in this country. The Roosevelt administration, which has sponsored legislation designed to safeguard and facilitate the privilege of concerted economic action on the part of employees in private industry, has merely re-echoed the conventional phrase, "You can't strike against the government." Most unions of civil service employees have written strike prohibitions into their constitutions, while the rest have explicitly or impliedly renounced this weapon.

Against this background of hostility, Dr. Ziskind has taken up the case for the extension of collective bargaining principles to government employees. The major portion of his work consists of a detailed catalogue of strikes among these groups, subdivided as to type of occupation. Of particular interest is his discussion of stoppages on public employment projects, the subject of so much recent controversy. There is also an interesting account of the famous Boston police strike, in which Calvin Coolidge played a significant rôle.

The latter portion of the book analyzes the causes and effects of strikes in government employment. Dr. Ziskind convincingly demonstrates that the root of this controversy is economic in character, growing out of lagging wages, outmoded and oppressive hours of labor, and intolerable working conditions. The strikes that have taken place have not, as is generally feared, resulted in near-anarchy or revolution, but on the contrary have rarely produced any serious breakdown in essential public services.

Dr. Ziskind's suggestion that the National Labor Relations act and similar regulatory statutes be extended to cover government employees, to the end that this class of worker be accorded the same collective bargaining privileges as are presently enjoyed by his fellows in private industry, far from subverting the authority of government, will rather serve to strengthen the democratic process by insuring one of its most important attributes—a loyal civil service.

WALTER GALENSON

Addresses on industrial relations, 1940. Bull. no. 10. (Ann Arbor: Univ. of Michigan Bur. of Industrial Rel. 1940. Pp. 121.)

Earnings in the women's and children's apparel industry in the spring of 1939. (Washington: Supt. Docs. 1940. Pp. vii, 91. 15c.)

Effective industrial use of women in the defense program. Spec. bull. no. 1. (Washington: Supt. Docs. 1940. Pp. 22. 10c.)

Employment regularization. (New York: Nat. Assoc. of Manufacturers. 1940. Pp. 95. 15c.)

Hours and earnings in certain men's-wear industries: raincoats, sports jackets. Bull. of the Women's Bur. no. 163-5. (Washington: Supt. Docs. 1940. 10c.)

The I. L. O. year-book, 1939-40. Tenth year of issue. (Geneva: Internat. Labour Office. 1940. Pp. viii, 345. $3.)

One new feature has been added to this issue, the tenth in the series—namely, the chapter on assistance to mobilized men and war victims.

The Labour Party: report of the thirty-ninth annual conference, Bournemouth, 1940. (London: Labour Party. 1940. Pp. 200. 1s. 6d.)

Money disbursements of wage earners and clerical workers in eight cities in the East North Central region, 1934-36. Bur. of Labor Stat. bull. 636. (Washington: U. S. Dept. of Labor. 1940. Pp. 443. 50c.)

Money disbursements of wage earners and clerical workers in the North Atlantic region, 1934-36. Vol. II. *Eleven cities.* Bur. of Labor Stat. bull. 637. (Washington: U. S. Dept. of Labor. 1939. Pp. 522. 75c.)

Ohio State Federation of Labor: proceedings of the fifty-sixth annual convention, August 19-22, 1940. (Cedar Point, Ohio: Ohio State Fed. of Labor. 1940. Pp. 159.)

Rights of labor: hearings, 76 Cong., 3rd Sess., pursuant to S. Res. 266 (74th Cong.). Part 52. *Los Angeles industrial background, January 10-11, 1940.* Part 53. *Open-shop activities, January 12-15, 1940.* Part 54. *Agricultural labor in California, January 13, 1940.* (Washington: Senate Educ. and Labor Committee. 1940. Pp. 19003-19395; 19397-19775; 19777-20073. 40c.; 35c.; 30c.)

Rules and regulations, series 2, as amended, and National Labor Relations act (49 Stat. 449), effective March 13, 1940. (Washington: Nat. Labor Rel. Board. 1940. Pp. 29. 10c.)

State minimum-wage laws and orders. 1939, suppl. to bull. 167. (Washington: U. S. Dept. of Labor, Women's Bur. 1940. Pp. 15. 5c.)

Wage-hour legislation and the white collar worker. (New York: United Office and Professional Workers of America. 1940. Pp. 18.)

Wage and hour structure of the furniture-manufacturing industry, October, 1937. Bull. 669. (Washington: U. S. Bur. of Labor Stat. 1940. Pp. 121. 20c.)

Wages, hours, and working conditions in union bakeries, June 1, 1939. Bull. 673. (Washington: U. S. Bur. of Labor Stat. 1940. Pp. 39. 10c.)

Money, Prices, Credit, and Banking

Commercial Banks and Consumer Instalment Credit. By JOHN M. CHAPMAN and Associates. Stud. in consumer instal. finan., 3. (New York: Nat. Bur. of Econ. Research. 1940. Pp. xxiv, 318. $3.00.)

This study of commercial banks as agencies of consumer instalment credit is one of a series dealing with the important financial institutions that participate in consumer instalment financing. The series also includes studies covering personal finance companies, sales finance companies, industrial banking companies, and government agencies in the field such as the Federal Housing Administration.

Both the direct and indirect participation of commercial banks in consumer instalment credit activities is traced largely by means of five extensive questionnaire surveys. Direct participation, that is, personal lending by commercial banks, has increasingly attracted large and small commercial banks which, in many cases, have established personal loan departments to promote this type of business. Indirect participation consists of the purchase by the commercial bank of the financing of sales finance companies, personal finance companies, industrial banking companies, and credit unions.

It is estimated that by the end of 1938, 1,500 commercial banks had

functioning personal loan departments; but, since many banks have been operating branches through which consumer instalment loans are made, the total number of banking offices now engaged in personal lending probably approaches 3,000. It is estimated that at the close of 1938 the commercial banks had consumer instalment loans outstanding of half a billion dollars, inclusive of sales finance paper and that during the year their services were used by over a million people. The commercial banks reached this state of development after a brief period of intensive growth; of approximately 1,200 personal loan departments, 80 per cent were established after 1931.

The study of risk factors in personal lending is based on a random sample of 2,765 cash instalment loans made by 21 banks operating in 16 cities. The professional group in the sample had a relatively good credit record, the wage-earning group a relatively poor one. Credit experience improves as the age of the borrower increases, women appear to be better credit risks than men; but neither marital status nor the number of the borrower's dependents appears to be significantly related to credit experience. Borrowers in low-income groups met their obligations as punctually as did those in the high-income groups.

The bulk of the commercial banks studied made loans at rates amounting to annual interest of 12 to 17 per cent on declining balances. In a few large metropolitan banks, which make loans at 4 per cent discount or less, the cost to the consumer in terms of true annual interest would be 7.7 per cent or even lower. Estimates of the cost of making a loan varied from $1.50 to $3.25; the cost of collecting each instalment payment was estimated at from twenty-five to thirty cents; thus the cost of acquiring and handling a 12-month loan may be calculated as ranging from $4.00 to $7.00. With such costs virtually constant in character, the small loans are less profitable than the large; the break-even point in size of loans ranges from $75.00 to $125.00. For departments having one full-time employee engaged in the small-loan business the bank needs to have an annual volume of from $75,000 to $100,000 and for departments having two full-time employees the annual volume should be from $100,000 to $200,000.

This is new business because the competition with personal finance companies and other personal loan agencies already in the field does not appear to be great. The older personal loan agencies appear to be dealing with lower-income groups and wage-earning groups more than do these new departments of the commercial banks, which cater largely to clerical, business, and professional occupations.

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Princeton University

Foreign Exchange Practice and Policy. By FRANK A. SOUTHARD, JR., with the Collaboration of PHILIP F. SWART, JR., and A. N. GENTES. (New York: McGraw-Hill. 1940. Pp. ix, 215. $2.50.)

There is a need for a book to synthesize and bring up to date for the student and for the lay reader the present somewhat sprawling body of information and theory relating foreign trade finance, the foreign exchange market and foreign exchange policy. This Professor Southard has attempted to do, with the collaboration of Mr. Philip F. Swart, Jr., and Mr. A. N. Gentes, both of whom are actively associated with the foreign department of a large New York bank. Their discussion takes up in order the balance of payments, the foreign exchange market, foreign exchange rates, the financing of foreign trade and finally, foreign exchange policy.

The attempt is not entirely successful, however. The book appears to have been written as an afterthought to the accumulation of a considerable amount of information on foreign trade financing in 1936 gathered from American exporters and importers by questionnaire, which, better organized, would have made a worth-while article. The foreign trade financing chapter of the book is the best, but even here Professor Southard's collaborators do not succeed in dispelling an aura of remoteness from actual contact with the subject. And in the remainder of the book there are a number of errors of reasoning and fact which seriously detract from its value.

The author's initial chapter on the balance of payments maintains that transactions which involve no international payment do not belong in the balance (but when exports are paid for with dollar balances previously acquired, both exports and the capital outflow are and should be included to relate the balance of payments to the balance of indebtedness); and it denies that every credit in international transactions has a debit (almost complete confusion reigns on the subject of balance *versus* equilibrium in the balance of payments). In the chapters on the foreign exchange market and rates of exchange, it is to be deplored that the author practically ignores the trading section of the foreign department of a bank, so that he: (1) talks of banks buying drafts because they anticipate a demand for the foreign currency concerned (a bank never buys exchange without at the same time selling it, and vice versa, unless it decides to alter its position); (2) uses an illustration of gold arbitrage (p. 109) which neglects the important fact of a ¼ per cent handling charge imposed by the United States Treasury on purchases and sales of gold; (3) makes the statement that in the last few years most of the gold flowing to the United States has been handled by private arbitrage. In his discussion of foreign exchange policy, however, Professor Southard does contribute interesting and readable discussions of the German and Argentine multiple exchange rate

systems—the latter not nearly widely enough understood. But even here he falls down in places, where for example he says that gold sterilization has no place in gold standard theory (p. 167, in this connection, theory has finally caught up with practice and now holds that where a capital inflow is not calculated to make a permanent addition to the capital equipment of a country, the gold inflow associated with it should be sterilized); and where he suggests that the dollar is distinctly overvalued (p. 184), despite evidence to the contrary from the side of the current account surplus in the balance of payments.

One disturbing error in the book is going to alienate the confidence of a number of students, and should make the publishers' proof-readers hang their heads. In discussing a hypothetical case of an exporter in Bethlehem, Pennsylvania, it is said that he "may depend on the nearest bank with its own foreign correspondents—possibly one in Pittsburgh." Approximate distance from Bethlehem in my small scale atlas: Philadelphia, 45 miles, New York, 70, Pittsburgh, 200!

CHARLES P. KINDLEBERGER

Basel, Switzerland

L'Évolution des Prix sur les Grands Marchés Mondiaux depuis 1933: Métaux non Ferreux, Matières Premières, Textiles, Blé, Sucre. By RADIVOÏ OUVALITCH. (Paris: Recueil Sirey. 1939. Pp. 231.)

The classical concept of world prices resulting from the free play of the forces of supply and demand was not only seriously threatened, but also definitely repudiated in the post-1929 decade, consequent upon the interactions of (1) monopolistic influences manifested in the drive toward concentration not only in commerce, but also in production, (2) state intervention, and (3) deliberate and conscious attempts to manipulate the balance of payments. But there is seen still to exist interdependence of prices in the various markets and in the various nations (pp. 10, 11). After a detailed study, illustrated with copious tables and charts, of the development of prices, production, consumption, supply and demand, of selected commodities, the general conclusion is that since 1929 there were three distinct phases in price movements up to the time this book was written. The first, very long, phase was a decline from 1929 to mid-1936 (p. 214), followed by a short revival of six to seven months, in the latter part of 1936 and early 1937. Beginning in 1937, a new crisis, characterized by an extremely sharp price drop, became manifest and was still in process in early 1939 (p. 214).

Attempts to maintain some semblance of order in prices were successful to some extent only because of the concentration of economic control, and because of state aid (p. 216). Most of the ententes, agreements, conferences and the like, were short-lived, subject to internal and external dissension;

and even if they were in complete control over their members, they did not encompass a sufficiently large proportion of their industry to control it (pp. 148, 216, 217). The difficulty of organizing agricultural ententes is self-evident, with, on the one hand, the large number of small owners who, when prices are low, attempt to raise an even greater amount of product in order to maintain their income (pp. 154, 218), and, on the other, the international conflicts of interests between the agriculture importing nations, and the exporters (pp. 195, 197, 218). Inelasticity of agricultural output to price is well known; price is always the result of production, but with no reciprocating action on production (p. 154). Thus, especially in agriculture was state aid necessary, in order to enforce reduction in output, to lessen imports, subsidize exports, and even to aid agriculture by means of other actions on prices, such as by purchase and storage, and even by monetary devaluation (pp. 154 *et seq.*, 203 *et seq.*, 219).

Despite the world-wide private and public attempts, results in general were mediocre (p. 219). In those cases, *e.g.*, tin, and to some extent, cotton, where control was effective, there resulted a decline in consumption (pp. 144, 168, 219), and a search, successful to some extent, for substitutes (pp. 138, 144, 145, 168, 169, 182-187, 217). In the case of agriculture, more intensive cultivation in nations where acreage was cut, and government-stimulated expansion of output in the normally importing nations, plus favorable growing weather, all tended to aggravate the situation (pp. 158, 168, 169, 195, 197, 219). The only "aid" from a business (price-profit economy) viewpoint was to be found in the poor crops resulting from droughts, dust storms and other meteorological phenomena (pp. 201, 219).

Dr. Ouvalitch states that his purpose is to reëxamine the development of prices in relation to money (p. 12). He believes that experience since 1929 with the realization, among other things, that unemployment, which was once considered a temporary cyclical phenomenon, is now seen to be a chronic one (p. 18), has brought to economists a certain modesty and humility (p. 7); and the intensity, global extent, and duration of the crisis have brought crashing to the ground their hopes of putting an end to business cycles, especially by use of statistical technique (pp. 7, 8). He does, however, think that statistics should be used to the fullest extent possible, but with sufficient caution (p. 8). Statistical technique is not the magic key which will provide the answer to all our problems, but only a tool to do in economics what the experimental method can do in the physical sciences.

The author points out that a new factor unknown in previous crises is seen in the voluntary devaluation of currencies (p. 19), but he maintains that there is no correlation between changes in the monetary gold stock and wholesale prices (pp. 21, 29), and that, whatever the influence exerted

by gold, it is only secondary and indirect, and except for short periods, it is opposite to that predicated by quantity theory (pp. 30-33). Nor does he give much credit to the concept of velocity of circulation (p. 32). However, he does make the bald statement that "devaluation of the dollar produced the desired effect on prices . . . . la dévaluation du dollar a produit l'effet voulu sur les prix" (p. 35; see also similar statements for each commodity, pp. 70, 96, 118, 142, 151, 167, 178, 179, 201). Similarly, he credits the price increases in France, toward the end of 1936, to the monetary reforms consequent upon the tripartite agreement. He hedges a bit, though, and attributes some part of the price rise to the improving general economic situation.

There is no place in this review to take up the interesting analyses of the history and development of prices of the four metals (copper, lead, tin, zinc), three textiles (cotton, wool, silk), and two foods (wheat, sugar). Suffice it to say that this book is more than just a statistical history. For each commodity, there is a well blended section which weaves together, brief history of the earliest use of the commodity, its present uses, sources of supply, channels of demand and, in a word, its whole environment. Statistics, many of them estimates by the author intricately arrived at, are combined with extra-statistical phenomena, especially the confused and involved history of concentration, cartels, plans, ententes, and so forth.

Included, too, is a well-selected bibliography of books, pamphlets, official reports, and periodical materials.

JAMES D. PARIS

Great Neck, New York

NEW BOOKS

ALLEN, H. H. *Whither interest rates? an appraisal of pressures in and from the capital markets.* (New York: Harper. 1940. Pp. xii, 196. $2.)

In probing the enigma *Whither Interest Rates,* the author's purpose is "to observe the 'substance' of causal factors behind low interest rates, and to point out that these are not as flimsy or ephemeral or even as 'arbitrary' as has been widely supposed . . ." (p. 142). The analysis is broad-gauged and avoids the common error of over-emphasizing a single cause or of developing a convenient theory which is all-embracing.

At the outset, consideration is given to the phenomena which are commonly advanced to account for the downward trend—huge gold imports, governmental policy, shrinkage of economic opportunity, and the cyclical pattern. For the most part, these are considered to be evidences rather than causal or basic factors of determination. In search of the latter, a study is made of the underlying forces which affect the demand for capital and the supply of savings. It is pointed out that curtailment of demand has resulted from the virtual cessation of foreign borrowing and from marked revisions in domestic business need and financial practice. At the same time, the supply of savings is shown to have been augmented at an unprecedented rate. After weighing the deep-seated pressures which affect demand and supply, the author observes that "the

balance of factors will continue to lie on the side of low or lower capital yield" (p. 139).

On the demand side, particular emphasis is placed upon the diminution of corporation needs brought about by increasing reserves which are set up out of earnings. However, it should be pointed out that reserves normally reflect a need for capital—management electing to put the earnings to work instead of disbursing them in the form of dividends. The significant aspect of reserve accumulations during the past decade is, therefore, that they are not being invested. Much more important, then, are the "inhibitions to revival of capital demand"—the uncertainties of (1) war or peace, (2) continuation of former growth, (3) obsolescence of machinery and products, (4) the outlook for prices and rates, and (5) the degree of participation of government in industry.

Forces of capital supply likewise contribute to declining interest rates. The discussion of life insurance as a source of saving is particularly informative and interesting. The prominence of this savings category becomes evident in comparing the trend of insurance assets with total corporate financing for new capital—the ratio increases from a level of around 20 per cent in the twenties to almost 120 per cent at the present time.

Several provocative questions of basic theory are raised but space will prevent their full analysis. Only two such points may be posed here.

(1) Reserve requirements (pp. 102-103). The argument is submitted that capital reserves must be accumulated to equal 200 per cent of the loan obligation. The author concedes that this "will jar conventional thinking in the accounting field" but bases his observation on the "actualities in industry." Questions may be raised about the long-term pertinency of such a reserve policy and about the complete omission of competitive pressure which must be assumed to permit the adoption of the policy.

(2) Effect of financial policies on market price. It is stated that the "speedy retirement of capital . . . ahead of obsolescence and other vicissitudes . . . can be accomplished only by stepping up the element of the capital cost in the price to consumers . . ." (pp. 139-140). By way of objection, it should be observed that sinking fund reserves are not normally included as a part of operating costs.

Altogether the book is stimulating in thought and provides a vivid reporting of the fundamental movements and trends. The author is to be commended for his realistic treatment of a subject which has long been mired in precedent and tradition.

W. H. HUSBAND

BACKMAN, J. *War time price control and the retail trade.* (New York: Nat. Retail Dry Goods Assoc. 1940. Pp. 48.)

BIALIK, M. L. *The coöperative credit movement in Palestine.* (Brooklyn: Author, 559 Sheffield Ave. 1940. Pp. 143. $2.)

CHASE, S. *Idle money, idle men.* (New York: Harcourt Brace. 1940. Pp. ix, 252. $2.)

CRAWFORD, A. W. *Monetary management under the New Deal: the evolution of a managed currency system, its problems and results.* (Washington: Am. Council on Pub. Affairs. 1940. Pp. x, 382. $3.75.)

DOCKER, F. J. *Foreign exchange.* (London: P. S. King. 1940. Pp. xii, 326. 15s.)

EBERSOLE, J. F. *Bank management: a case book.* 3rd ed. (New York: McGraw-Hill. 1940. Pp. xv, 626. $5.)

Cases on loans, investments, allocation of assets, expansion, administrative problems, coöperative control and public supervision.

FERGUSON, D. G., FRANCIS, B. H., HARWOOD, E. C. MANTON, B. D., and others. *What will inflation and devaluation mean to you?* (Cambridge: Am. Inst. for Econ. Research. 1940. Pp. 144. $1.)

FOSTER, M. B. and RODGERS, R., editors. *Money and banking*. Rev. ed. (New York: Prentice-Hall. 1940. Pp. xviii, 733. $5, trade; $4, school.)

FOULKE, R. A. and PROCHNOW, H. V. *Practical bank credit.* (New York: Prentice-Hall. 1940. Pp. 690. $7.50.)

GAYER, A. D. and ROSTOW, W. W. *How money works*. Pamph. no. 45. (New York: Pub. Affairs Committee. 1940. Pp. 31. 10c.)

HALES, C. A. *The Baltimore Clearing House.* (Baltimore: Johns Hopkins Press. 1940. Pp. xiii, 347. $3.)

HARDY, C. O. *Wartime control of prices.* (Washington: Brookings Inst. 1940. Pp. x, 216. $1.)

HOLTHAUSEN, D. M., in collaboration with MERRIAM, M. L. and NUGENT, R. *The volume of consumer instalment credit, 1929-38*. Stud. in consumer instal. finan. 7. (New York: Nat. Bur. of Econ. Research. 1940. Pp. xix, 137. $1.50.)

JAMES, F. C. *The economics of money, credit and banking*. 3rd ed., rev. and enl. (New York: Ronald. 1940. Pp. xxi, 745. $4.)

MILLS, F. C. *The anatomy of prices, 1890-1940*. Bull. 80. (New York: Nat. Bur. of Econ. Research. 1940. Pp. 16.)

MORGAN-WEBB, C. *Monetary management.* (London: Pitman. 1939. Pp. xi, 143. 7s. 6d.)

MYERS, M. G. *Monetary proposals for social reform.* (New York: Columbia Univ. Press. 1940. Pp. x, 191. $2.25.)

This is a volume published in celebration of the seventy-fifth anniversary of Vassar College and in honor of President H. N. MacCracken of that institution. Of the manifold proposals for social reform by monetary means, the author has selected three—those of Gesell, Soddy and Douglas—for comment, explanation and criticism. As Dr. Myers states in the preface, proposals based on the ideas of these men "have gained acceptance among so large a part of the public that it has seemed important to consider some of the more glaring defects which they contain."

Dr. Myers has accomplished her purpose in highly commendatory fashion. The proposals and theories of the authors noted have been examined meticulously and their analyses and conclusions have been subjected to fair but cogent criticism.

After considering the arguments of Gesell, Soddy and Douglas, Dr. Myers devotes a chapter to "The actual experience" in which she describes actual attempts to put the advocated reforms into practice. She feels that it is unfortunate that none of these has been permitted to go far enough to test the theory fully by practical experiment, although the success of their outcome is most dubious, even had conditions been more propitious.

A final chapter on "The limitations of monetary management" is a fitting conclusion to this excellent piece of work. Although, naturally, it is not on the cards to analyze monetary theory in seventeen pages, Dr. Myers has presented the problem in brief space as well, in the opinion of the reviewer, as it could be done.

FREDERICK A. BRADFORD

PARKINSON, J. F. editor. *Canadian investment and foreign exchange problems.* (Toronto: Univ. of Toronto Press. 1940. Pp. ix, 292. $3.)

This book is really two in one. The articles in each section of it are based upon papers delivered in two separate lecture series given at the University of Toronto and before the monetary group of the Canadian Institute of International Affairs. Both survey from many different angles the development in the Canadian capital market and in Canada's balance of payments and foreign exchange position between the Great War and the present war. The former section shows that the Canadian capital market has become mature. Though not directly treated, the implications of this change for war finance now are obvious and important. The latter section not only deals with the changing character of Canada's balance of payments between the two wars, but explains the foreign exchange control measures which were taken when the present war began.

Most of the authors are practical bankers and financial men in the city of Toronto. Professor Parkinson of the department of economics of the University of Toronto, does a good editorial job as well as contributing two articles. One of these is on "The theory of the mechanism of adjustment" with special reference to Canada, and the other describes how Canada's international accounts are compiled today. Two of his colleagues at the University of Toronto also appear in the list of authors. Professor D. C. MacGregor states and comments on the changing trends in the attitudes and practices of the Canadian investor. Professor A. F. W. Plumptre gives a good popular account of what central banks are designed to do, and relates briefly the results of the actions of the Bank of Canada since its establishment in 1935. In a further article he discusses a more general topic, "The end of the gold standard." Though gold may still be used as a medium of international payments, he thinks that the nineteenth century international monetary standard based upon gold has gone, along with the world of *laissez-faire.*

Students of Canadian finance will find in these essays much material on financial institutions and their operations, and on monetary and financial history, which is not readily available elsewhere. The articles are well and simply written, and avoid economic jargon for the most part.

F. A. KNOX

PLUMMER, W. C. and YOUNG, R. A. *Sales finance companies and their credit practices.* Stud. in consumer instal. finan. no. 2. (New York: Nat. Bur. of Econ. Research. 1940. Pp. xxiii, 298. $3.)

PRATHER, C. L. *Money and banking.* Rev. ed. (Chicago: Richard D. Irwin. 1940. Pp. xvi, 903. $4.)

Dr. Prather has completely revised, brought to date, and improved the earlier edition of his elementary text. Additional space and emphasis have been given to the sections on commercial banking and foreign exchange. The arrangement of material is substantially unchanged with the notable exception of the appearance of the chapter on the theory of the value of money very early in the book. The excellent treatment of government credit institutions and the rôle of government in the regulation of other types of financial institutions is especially valuable. As in the earlier edition, however, only brief consideration is given to the problems of monetary and central bank credit policy, and little attention is devoted to the objectives of monetary policy.

BERTRAND FOX

RATHERT, A. R. *Public employee credit unions: a review of organized coöperative credit among teachers and other government employees.* (Minneapolis: Minn. State Fed. of Teachers. 1940. Pp. 18. 10c.)

ROBERTS, G. B., editor. *A forum of finance.* (New York: Columbia Univ. Press. 1940. Pp. 233. $2.50.)

SCHERMAN, H. *The real danger in our gold.* (New York: Simon and Schuster. 1940. Pp. 82. $1.)

This is one of the soft-cover, popular treatments of economic problems that is designed to distill for the layman the best thoughts of specialists in the subject. Beginning with a very readable and helpful presentation of the orthodox relation of gold to currency and credit under a gold standard of the type prevailing in this country before 1933, Mr. Scherman represents this relation as being, except for obvious legislative modifications, appropriate to the current situation. With this technical foundation laid, the central argument concerning the dangers inherent in the legislative modifications, of which nationalization of gold and the establishment of inconvertibility are the chief, is advanced. These dangers are continued accumulation of government debt, and ultimate devaluation. Under a gold standard, ease of bond flotation is restricted by convertibility; for, while this does not directly limit debt creation (as reserves limit currency issue), it can indirectly limit the rate of issue through the effects of demands for conversion on the market values of new and old government bonds and, more importantly, by "registering a judgment" (author uses italics) on what the government is doing. In the absence of convertibility, this brake does not exist, and debt formation is encouraged. It has been traditional for governments to wipe out unusually large debts by resort to devaluation. Moreover, under this country's "Gold Prohibition law" (Emergency Banking act of 1933) all gold is concentrated in government possession, so any "profit" from devaluation can be retained entirely by the government. Devaluation under these circumstances is therefore more attractive to the government than it would be if convertibility and private ownership were restored.

Mr. Scherman's explicit disapproval of the arbitrariness introduced into our monetary system by some New Deal legislation may be matched by more economists than he imagines. His faith in the automatism of the gold standard as a check on governmental extravagance, his assumption that under inconvertibility there is no similar check, and his objection to inconvertible systems on the basis of their not making governments "absolutely reliable in their debt fulfillment" (page 74, under what systems are they?) are hardly calculated to win equal support. That these arguments may be reaching a large reading public should add to the interest they may hold on other accounts. Mr. Scherman's conclusion that a return to the gold standard should have been made the issue of the 1940 election campaign appropriately caps an argumentation that seems, moreover, to become increasingly political from page to page.

DONALD W. O'CONNELL

VALLARINO, J. C. *Moneda y patron monetario: doctrina y tesis.* (Montevideo: Impresora Moderna. 1940. Pp. 271.)

The author deals successively with such matters as the mercantilist and liberal theories of money, the position of the nominalists, monetary functions and standards, and completes his far-flung but summary inquiries with three chapters on the value of money. The treatment, besides being unduly sketchy,

is conventional throughout, so much so that one wonders why he has felt it necessary to offer another book to Spanish readers already provided with no small number of translations of well known European and American works on monetary theory and practice. Favoring a return to gold, he rather naïvely conceives the principal problem to be that of obtaining international agreement on some *maximum* specie coverage, the only manner in his estimation of bringing about a more even distribution of the world's monetary gold. The point is not developed, nor does one find qualifying statements suggesting the author's conversance with even the simplest proposition of the theory of the mechanism of adjustment.

VIRGIL SALERA

WOOD, E. *English theories of central banking control, 1819-1858, with some account of contemporary procedure.* Harvard econ. stud., vol. lxiv. (Cambridge: Harvard Univ. Press. 1939. Pp. xiii, 250. $5.)

This volume presents a study of early English theories of central banking control. Part 1 deals with theories which were promulgated between 1819 and 1844, prior to the passage of the Bank act, and part 2 is concerned with theories from 1844 to 1858. The two parts are followed by a chapter containing the author's general conclusions, an appendix, a bibliography and index. The volume was awarded the David A. Wells prize for the year 1937-38.

There is no doubt of the value of Dr. Wood's contribution. He has examined with careful precision the theories of the major writers and bankers of the two periods into which his study is divided. The opinions of Tooke, Newmarch, Thornton, Palmer, Loyd and many others are summarized in excellent fashion and commented on by the author. The material considered is concerned with theories of the Bank of England's control over the country banks and their circulation, over the money market, and over general prices. As would naturally be expected, there were considerable differences of opinion by the informed men of the day on these questions; and these diverse opinions are set forth clearly and concisely by the author.

Dr. Wood's own conclusion seems to be that most of the theories which he has reviewed have not stressed sufficiently the fact that the Bank of England really controlled the international gold standard rather than the gold standard controlling the policy of the Bank. This judgment, while perfectly sound as stated by the author, can, it seems to me, be over-emphasized and has been in some of the remarks the reviewer has seen with respect to the volume.

In conclusion, it should be pointed out that the appendix, and the text itself in places, contains excellent charts and statistical tables in support of the author's argument and conclusions.

FREDERICK A. BRADFORD

Bank for International Settlements: tenth annual report, 1st April, 1939—31st March, 1940. (Basle: Bank for Internat. Settlements. 1940. Pp. 159.)

Federal Home Loan Bank act: hearings, 76th Cong., 3rd Sess., on S. 4095 and H. R. 6971, bills to amend the Federal Home Loan Bank act, Home Owners' Loan act of 1933, title 4 of the National Housing act, and for other purposes, June 11-20, 1940. (Washington: Senate Banking and Currency Committee. 1940. Pp. 120. 15c.)

Proceedings of the first annual New Hampshire bank management conference, held at the Amos Tuck School of Administration and Finance, Dartmouth College, June 7 and 8, 1940: general subject, bank loan and investment policies. (Hanover, N.H.: Amos Tuck School of Admin. and Finance. 1940. Pp. vi, 80.)

Trends in North Carolina banking, 1939. (Raleigh: N.C. Bankers Assoc. 1940. Pp. 31.)

Public Finance, Taxation, and Tariff

NEW BOOKS

ALLEN, H. K. *Control of expenditures in the local governmental units of Illinois.* Bull. no. 61. (Urbana: Univ. of Illinois. 1940. Pp. 58.)

ARANT, W. D. *Taxing excess profits.* (New York: Nat. Economy League. 1940. Pp. 14. Gratis.)

BAYLEY, V. H. M. and TAYLOR, E. M. *The excess profits tax.* (London: Macdonald and Evans. 1939. Pp. 113. 6s.)

BROWN, F. H., GIBSON, J. D. and PLUMPTRE, A. F. W. *War finance in Canada.* (Toronto: Ryerson Press. 1940. Pp. 110. 75c.)

This book, published under the auspices of the Canadian Institute of International Affairs, consists of three papers on different aspects of its subject. In the first paper, Mr. Brown gives a useful summary of Dominion public finance during the period 1914-20. His summary of the currency and banking situation presents very concisely—and therefore dogmatically—the views widely held in commercial banking circles that the methods of Canadian finance during this period were not responsible for the rise in Canadian prices.

Mr. Gibson's paper on the principles of war finance is a serviceable exposition for the general reader of the economics of war. Following in general Professor Pigou, the author discusses the sources from which war production can be obtained and the merits and defects of taxation, borrowing from saving, foreign borrowing and inflation as methods of war finance. He then summarizes Mr. Keynes's compulsory savings proposals and, in a brief reference to Canada's current position, expresses the opinion that Canada may be in a position to finance the present war by less inflationary methods than those she pursued in the last one.

In the longest paper of the book Mr. Plumptre and his associates undertake the ambitious and interesting project of estimating the extent of the war effort which Canada may be expected to make in a "normal" war year without marked inflation or extensive resort to regimentation. The estimates are designed to show the inter-relationships and repercussions of financial policies and to give a rough impression of the relative magnitudes involved. The reader is repeatedly warned against taking too seriously the actual numerical conclusions. In the accompanying discussion it is made clear that it is difficult to distinguish between taxation, saving and inflation in war finance, and that apparently orthodox financial policies under some circumstances may be responsible for inflation. The discussion of Canada's probable "normal" war balance of international payments shows the extent to which Canada's war problems are related to the financial policies of the United States and to the tariff policies of the other countries of the British Commonwealth.

On the whole the authors have succeeded very well in giving a concise

non-technical discussion of the problems of war finance in the Canadian setting.

G. A. ELLIOTT

BURNS, A. E. and WATSON, D. S. *Government spending and economic expansion.* (Washington: Am. Council on Public Affairs. 1940. Pp. vi, 176. $2.50.)

CHERNE, L. M., and others. *Should we conscript wealth, too?* Round table broadcast no. 132. (Chicago: Univ. of Chicago. 1940. Pp. 28. 10c.)

GARWOOD, M. *Estate planning to minimize taxes.* (New York: Prentice-Hall. 1940. Pp. 279. $3.50.)

HOPE-JONES, A. *Income tax in the Napoleonic Wars.* (London: Cambridge Univ. Press. New York: Macmillan. 1939. Pp. x, 145. $2.25.)

Readers of this excellent monograph cannot fail to find an analogy between its background and Great Britain's present plight. Then, as now, Britain virtually alone faced a hostile continent. It remains to be seen whether there will be a modern counterpart for those great fiscal reforms of Pitt the Younger, the consolidated fund and the income tax, the latter of which is the subject of this study.

The author's opportunity to make a basic contribution at this time is in part due to the accidental discovery of the income tax records of the period after a century's belief that they had been destroyed in a bonfire acclaiming the repeal of the war levy. Introductory chapters describe the antecedents of the tax and the circumstances surrounding its introduction in 1799. The several chapters which follow show how the development of administrative, legal, and personnel machinery made possible the successful collection of the levy in the face of jealously guarded traditions and privileges which would have otherwise defeated it. Of the greatest interest to students of both public finance and economic history is the detailed analysis of the experience with the income tax between 1806 and 1816, the decade which saw the forerunner of England's modern tax, the 2 shillings per pound schedular levy. The annual yields of from 11-16 million pounds are broken down by schedules as well as by geographic areas, thus providing a detailed picture of economic developments during the Napoleonic War period. The author points out that rising prices, combined with increasing administrative efficiency, made possible a steady increase in collections despite violent fluctuations in foreign trade and in the agricultural contribution to the tax base.

J. WILNER SUNDELSON

HUNTER, M. H. and ALLEN, H. K. *Principles of public finance.* (New York: Harper. 1940. Pp. xx 672. $3.50.)

This book is a complete revision of Professor Hunter's well known *Outlines of Public Finance.* Though arranged for use as a textbook, the clarity of its style also commends it to the general reader. Its usefulness as a text has been increased by the addition of questions and exercises at the end of each chapter. Many of the questions relate to finance in the student's own city and state, thereby increasing his interest and showing him the practical importance of the subject. In the appendix will be found the essential parts of the second report on a plan for a model system of state and local taxation, presented by a committee of the National Tax Association.

In this edition more attention is given to the grant-in-aid. An entire chapter

is now devoted to the general sales tax, including the recent use tax, adopted to prevent avoidance of the sales tax through purchases outside the state. Two chapters are allotted to emergency financing, one to war and the other to depression financing. The reader will also find an account of the recent taxes on chain stores, on commercial motor transportation and on undistributed profits. An entire chapter is devoted to "Legal foundations of taxation."

Likewise, frequent use is made of economic theory. The authors explain how deficits, met by an increase in bank credit, may lead to inflation as well as those covered by the issue of paper money. They also show how the burden of war, except in the case of foreign loans, must be borne by the war generation. While they favor the use of taxation in war as much as possible, they realize that recourse must also be had to borrowing. People will lend when they will not pay taxes.

Economic theory is also much employed in the chapter bearing the novel title, "Taxation of economic surplus." Here are taken up taxes on various incomes that might be viewed as yielding a surplus above necessary costs, especially the single tax and taxes on war profits and excess profits. In objecting to the use which Henry George made of the distinction between land and the improvements thereon, the authors hold that "the distinction is one without a difference, or at least there is only a difference of degree. . . . The clay in the brick came from the hillside . . ." (p. 406). Economists who hold to the classical distinction between land and capital would probably say with Professor Carver that a difference in degree may constitute a difference in kind.

CHARLES P. HUSE

KEYNES, J. M. *How to pay for the war: a radical plan for the Chancellor of the Exchequer.* (New York: Harcourt Brace. 1940. Pp. vii, 88. $1.)

John Maynard Keynes's revised plan not merely improves his previous proposals for compulsory savings, but connects them with a complete schedule for a democratic war-economy. The new plan sketches a budget for next year which relies on the present rates of taxation and substitutes compulsory for voluntary savings. It aims to avoid inflation and totalitarian rationing, and to advance toward social equality. By "accepting the idea of the 'iron ration' and of family allowances for all, as well as scaling down the rates of compulsory incomes," Mr. Keynes insures that "the poorest section of the population will be slightly better off than before—provided that the government solves the problem of increasing production."

LOWE, J. B. and WRIGHT, J. D. *Minimizing taxes on incomes and estates.* Rev. ed. (New York: Barron's. 1940. Pp. 138. $2.)

MURPHY, L. S. *State forest tax law digest of 1939.* (Washington: Forest Taxation Inquiry. 1939. Pp. 52, mimeographed.)

NELSON, A. Z., compiler. *Forest land taxation in Michigan.* (Washington: Forest Taxation Inquiry. 1940. Pp. 46, mimeographed.)

———. *Rural assessment with special reference to forests: a bibliography.* (Washington: Forest Taxation Inquiry. 1940. Pp. 29, mimeographed.)

NEWCOMER, M. *Taxation and fiscal policy.* (New York: Columbia Univ. Press. 1940. Pp. vi, 89. $1.25.)

OLCOTT, M. T., compiler. *Homestead tax exemption in the United States: a selected list of references.* Econ. lib. list no. 15. (Washington: U. S. Bur. of Agric. Econ. 1940. Pp. 23, mimeographed.)

SCHMIDT, E. B. *Tax systems of Nebraska.* Nebraska stud. in bus. no. 46. (Lincoln: Univ. of Nebraska. 1940. Pp. vi, 42. 50c.)

SELKO, D. T. *The federal financial system.* (Washington: Brookings Inst. 1940. Pp. xii, 606. $3.50.)

SHATTUCK, L. A., JR. *Municipal indebtedness: a study of the debt-to-property ratio.* Stud. in hist. and pol. sci., ser. lviii, no. 2. (Baltimore: Johns Hopkins Press. 1940. Pp. 145.)

STRADLEY, L. P., and others. *Corporate taxation and procedure in Pennsylvania.* (Chicago: Commerce Clearing House. 1940. Pp. 475. $10.)

VAKIL, C. N. and PATEL, M. H. *Finance under provincial autonomy.* (Bombay: Longmans Green. 1940. Pp. xi, 200. Rs. 4.)

WATERS, L. L. *Use taxes and their legal and economic background.* Kansas stud. in bus. no. 19. (Lawrence: Univ. of Kansas. 1940. Pp. 92. 50c.)

WEAVER, F. *Oklahoma's deficit: a study in financial administration.* (Norman: Univ. of Oklahoma Press. 1940. Pp. viii, 67. 50c.)

The administration of gasoline tax refunds and exemptions. (Chicago: Fed. of Tax Administrators. 1940. Pp. 32. 75c.)

Assessment supervision. 7th progress report of the Committee on Assessment Organization and Personnel. (Chicago: Nat. Assoc. of Assessing Officers. 1940. Pp. 46. $1.)

La conversión y unificación de la deuda publica interna y externa de la provincia de Buenos Aires, de 1935: resultados económicos y financieros. (Buenos Aires: Instituto de Finanzas Argentinas, Univ. de Buenos Aires. 1939. Pp. 91.)

Fiscal possibilities for national defense. Stud. in econ. of nat. defense no. 6. Suppl. to *Economic Record.* (New York: Nat. Industrial Conf. Board. 1940. Pp. 8.)

Illinois tax problems: proceedings of an open forum on taxation and tax problems in Illinois. Spec. rep. no. 5. (Chicago: Illinois Tax Commission. 1940. Pp. xii, 423.)

Among the problems discussed are the property tax, delinquency, major expenditure problems in Illinois, and the necessity for tax reform and improvement in tax laws. Since the uniformity clause of the Illinois constitution has been interpreted in such a manner that an income tax would be unconstitutional, considerable discussion is devoted to the present method of taxing intangibles under the property tax. Access to federal income tax returns has improved the situation somewhat, but it is still highly unsatisfactory. Various worth-while suggestions are made for improving assessments, reducing delinquency, and improving tax collection procedures. A modern business tax for Illinois is also proposed. But any fundamental change in the tax system of Illinois would probably require a constitutional amendment, and it is extremely difficult to amend the constitution in Illinois.

CATHERINE G. RUGGLES

Internal organization of local assessment offices. 8th progress report of the Committee on Assessment Organization and Personnel. (Chicago: Nat. Assoc. of Assessing Officers. 1940. Pp. 43. $1.)

Milk publicity tax law of 1934 and amendments of 1935, 1936, 1937, 1938, 1939 and 1940: State of New York. Article 19 of the tax law and departmental regulations. (Albany: State House. 1940. Pp. 44.)

Personnel administration in local assessment offices. 10th progress report of the

Committee on Assessment Organization and Personnel. (Chicago: Nat. Assoc. of Assessing Officers. 1940. Pp. 49. $1.)

Property taxes: symposium conducted by the Tax Policy League, December 27-29, 1939, in Philadelphia, Pennsylvania. (New York: Tax Policy League. 1940. Pp. vi, 228. $2.50.)

The 1939 symposium of the Tax Policy League was devoted to a discussion of property taxes. The first part deals with trends in property taxation. This includes a general survey of the importance of the property tax in state and local tax systems and the difficulties of using realty as a reimbursement base. Two chapters are devoted to over-all tax limitation laws. These contrast the policies of Ohio and West Virginia. Akin to the movement for tax limitation laws is that for homestead exemptions.

The third part of the volume is concerned with the justification of the property tax. The usual conclusion is reached that the property tax cannot be justified on the basis of ability to pay, and although it may be justified in part on the ability principle, further use of the benefit principle would be socially undesirable.

Professor Groves proposes three different bases for differentiating income for purposes of taxation: the first is ethical, distinguishing between income that is deserved or undeserved; the second classifies income according to the effects upon future production which taxing it would have; and the third looks to "the sacrifice involved in making payments."

CATHERINE G. RUGGLES

Property tax law: New York State. Articles 1-8. (Albany: State House. 1940. Pp. 132.)

Revenue act of 1940: hearings, 76th Cong., 3rd Sess., on H. R. 9966, to provide for the expenses of national preparedness by raising revenue and issuing bonds, to provide a method for paying for such bonds, and for other purposes, May 31-June 4, 1940. (Washington: House Ways and Means Committee. 1940. Pp. 167. 15c.)

Revenue act of 1940: hearings, 76th Cong., 3rd Sess., on H. R. 10039, act to provide for expenses of national preparedness by raising revenue and issuing bonds, to provide a method for paying for such bonds, and for other purposes, June 12-14, 1940. (Washington: Senate Finance Committee. 1940. Pp. 157. 20c.)

Selection, tenure, and compensation of assessors. 9th progress report of the Committee on Assessment Organization and Personnel. (Chicago: Nat. Assoc. of Assessing Officers. 1940. Pp. 60. $1.)

Statistics of income for 1937. Part 1. *Compiled from individual income tax returns, fiduciary income tax returns, estate tax returns, and gift tax returns.* (Washington: Treasury Dept., Internal Revenue Bur. 1940. Pp. 238. 25c.)

Statistics of income for 1938: preliminary report of individual income tax returns and taxable fiduciary income tax returns filed in the period January through June, 1939. (Washington: Treasury Dept., Internal Revenue Bur. 1940. Pp. 19. 5c.)

Tax systems: a year book of legislative and statistical information including all the states of the United States and certain Canadian and foreign data. By the Tax Research Found. 8th ed. (Chicago: Commerce Clearing House. 1940. Pp. xi, 395. $8.75.)

"The scope proposed for this work includes the following major divisions:

(1) charts of all the important tax systems of the world; (2) condensed histories of taxation in the more important jurisdictions (this section is waiting for the invention of a sufficiently condensed form of presentation); (3) charts of the tax systems which leading authorities think we should have; (4) similar charts of the tax systems which the various taxable groups such as the public utilities, the banks, the real estate interests, the farmers and organized labor, desire us to have; (5) the complete terminology of a model state-and-local tax law to be offered for the consideration of the various American legislatures; (6) the world's total annual tax bill showing the amounts raised by the different taxes in each country and in each state; (7) a comprehensive series of status tables showing in immediately comparable form the more essential tax facts in the various states; (8) a similar and of course much more important series of status tables showing the corresponding information relative to the tax systems of the various national governments throughout the world; (9) the principles of taxation stated in summary form; (10) tables showing the tax burdens on various imports in the different countries; (11) a section devoted to the best methods of administration of the various taxes including standardized forms; (12) an assessors' manual for arriving at the taxable valuation of lands and improvements; (13) the key language of the key decisions and several other features necessary to make the volume a complete library inside one set of covers."

The village law concerning property taxation, 1940: New York State. Bull. vol. xxv, no. 6. (Albany: State House. 1940. Pp. 45.)

War finance in Britain. Pamph. on world affairs no. 25. (New York: Farrar and Rinehart. 1940. Pp. 31. 15c.)

Population and Migration

NEW BOOKS

BURCH, G. I. *The reason for birth control, with special reference to business conditions, population growth, and national defense*. (Washington: Population Reference Bur. 1940. Pp. 14.)

COHEN, F. S. *Immigration and national welfare*. (New York: League for Industrial Democracy. 1940. Pp. 40. 15c.)

GLASS, D. V. *Population policies and movements in Europe*. (New York: Oxford Univ. Press. 1940. Pp. vi, 490. $6.)

LORIMER, F., WINSTON, E., and KISER, L. K. *Foundations of American population policy*. For the Committee on Population Stud. and Soc. Planning of the Nat. Econ. and Soc. Planning Assoc. (New York: Harper. 1940. Pp. xiii, 178. $2.50.)

MARSCHNER, F. J. *Rural population density in the southern Appalachians*. U. S. Dept. of Agric. misc. pub. no. 367. (Washington: Supt. Docs. 1940. Pp. 18. 25c.)

VINCI, F. *Problemi demografici*. (Bologna: Zanichelli. 1939. Pp. vi, 228. L. 20.)

This is a reprint of more than two score articles, written years ago. The first paper dates from December 1927, *i.e.*, a few months after Mussolini's first important speech dealing with demographic policy. Developing the political program of fascism, the Duce claims there the right of a "well ordinated state" to watch the physical health of its people, or what he terms, the destiny of the race. By taking care of the future of her citizens through legal

and moral directions—beginning with motherhood and childhood of course—Italy (and other countries ruled by dictators) undertakes not merely a progressive social policy in the field of demography, but also a policy of *quantitative increasing* of the inhabitants, where there is already a high density of population.

PAUL UCKER

Virgin Islands of the United States: population composition and characteristics. Part 1. *Work-status summary.* 16th census of U. S. (Washington: U. S. Bur. of the Census. 1940. Pp. 26.)

Social Problems and Reforms

NEW BOOKS

CARPENTER, C. E. *Private enterprise and democracy.* (New York: Longmans Green. 1940. Pp. 217. $2.50.)

CHINDEGREN, R. P. *A study of housing needs of renting families and available rental facilities in Ontario, Oregon.* Thesis ser. no. 13. (Eugene: State System of Higher Educ. 1940. Pp. 64. 35c.)

DENNIS, L. *The dynamics of war and revolution.* (New York: Weekly Foreign Letter, 515 Madison Ave. 1940. Pp. xxxi, 259. $3.)

GAER, J. *Consumers all: the problem of consumer protection.* (New York: Harcourt Brace. 1940. Pp. 220. $2.)

GILSON, M. B. *What's past is prologue: reflections on my industrial experience.* (New York: Harper. 1940. Pp. xii, 307. $3.)

CHANDLER, A. R., compiler. *The clash of political ideals: a source book on democracy, communism and the totalitarian state.* (New York: Appleton-Century. 1940. Pp. xvii, 273. $2.)

GOETSCH, H. B. *Parental income and college opportunities.* Contribs. to educ. no. 795. (New York: Bur. of Pubs., Teachers Coll., Columbia Univ. 1940. Pp. ix, 157. $1.85.)

"In this report intellectually gifted students continuing their schooling are compared with those not continuing their schooling to discover the psychological, economic, and social selection which takes place between high school and college. The family background and individual plans of approximately a thousand Milwaukee public high school graduates with intelligence quotients of 117 to 146 were carefully surveyed, and the economic status of their parents was reliably determined."

GREENBERG, E., compiler. *Social science references: thirty essential manuals, yearbooks, collections and indexes described for students.* (New York: New York Univ. Bookstore. 1940. Pp. 22. 15c.)

HART, C. W. M., editor. *Essays in sociology.* (Toronto: Univ. of Toronto Press. 1940. Pp. viii, 95. $2.)

HOYT, H. and BADGLEY, L. D. *The housing demand of workers in Manhattan.* (New York: Corlears Hook Group. 1939. Pp. ix, 172.)

Lending institutions have by nature a deep interest both in the present and the future of the greatest single real estate development in the world—New York City. The study carried through jointly by Dr. Hoyt and Mr. Badgley is the second survey of the major American metropolis which has earned the support of such institutions.

Recent proposals for substantial housing projects within New York City induced a group of savings banks and insurance companies to seek more factual data than was available; for large amounts of mortgage money would be required in the development of the proposed construction. The coöperation of the Federal Housing Administration was sought and granted to the extent of assigning expert housing economists from its staff to supervise the research entailed. To Dr. Hoyt went the responsibility for the preparation of the text of the report and to Mr. Badgley the bulk of the responsibility for devising the survey technique.

The analysis resolves itself into a consideration of three apartment housing areas. Of the three areas greatest attention is bestowed on the problem agglomeration encompassed within the section known as the Lower East Side. The Lower East Side of New York City is a problem agglomeration in the sense that the drift of land use in this area is a matter of uncertainty. In 1939 one-eighth of the entire land area in this section consisted of non-income producing properties.

Against the Lower East Side is buttressed a composite of those apartment areas which compete with it in transportation time and cost and social, cultural and recreational amenities. And finally there is the outlying area in the various boroughs, in New Jersey as well as in Westchester County, New York, and Nassau County, Long Island. New bridges, express highways and tunnels which facilitate egress from Manhattan, enable these areas to offer both apartment and single family accommodation to the migrant metropolitan worker, looking, like Sandburg's boll weevil, for a home.

The study is amply equipped with charts and statistical data and is an outstanding example of intensive inquiry thrown against a background of comprehensive information.

A. R. Hasse

Jansen, W. *The social agencies and public education in New York City.* (New York: Bur. of Pubs., Teachers Coll. 1940. Pp. 140. $1.85.)

Lewis, W. A. *Economic problems of to-day.* (New York: Longmans Green. 1940. Pp. xii, 179. $1.25.)

This little volume is not written primarily for economists, but for students and laymen generally, and there is no attempt at exhaustive analysis. The first four chapters deal with conditions in England, and discuss the allocation of resources, distribution of income, international economic relations, and unemployment. The remaining chapters describe recent economic developments and governmental policies in Russia, Germany, France, and the United States. In this section the author is frankly critical of the methods of economic control in each of the countries named.

The general reader will find this a helpful introduction to current economic questions. The author contrasts peace time economic problems with those arising during the stress of war, and he portrays in a striking way the significance and implications of a war time economy. A war economy demands such sweeping and rapid changes in production that the ordinary forces of the market operate altogether too slowly to guarantee the effective utilization of resources. Consequently the leading countries are adopting more arbitrary methods of economic control; each nation developing its own peculiar directive techniques.

J. E. Moffat

LEYBOURNE, G. G. and WHITE, K. *Education and the birth-rate: a social dilemma.* (London: Jonathan Cape. 1940. Pp. vii, 375. 10s. 6d.)

The bulk of this book is devoted to an analysis of the British educational system during the last half century, in particular of the type of schools and colleges and of the direct and indirect costs imposed on the parents of their students. Most of the remaining space is utilized to discuss the probable depressing effect of these costs on the birth rate, and various means of alleviating this pressure.

The various state aids to education—free schools and free places or allowances in tuition-charging schools and universities—have not been adequate to meet the demand for educating children of families which cannot afford to pay the remaining costs associated with school attendance. State aid, although starting late, has increased rapidly, but the desire for better education has outstripped it. One criterion of the lag is the large number of children with an I.Q. exceeding 130 who do not rank sufficiently high in competitive examinations to obtain "special places" in the secondary or "central" schools, and whose parents have too small an income to send them to these schools. It is not claimed that the state should guarantee a higher education for each child, but only "a post-primary education suitable for its abilities."

The authors maintain that even the generally inadequate education of children in the past has required substantial sacrifices on the part of parents, among which a reduction in family size has been important. "Conclusive or exhaustive proof of this contention has been lacking . . . scattered, but direct, evidence, however, is plentiful."

Among the remedies suggested are (1) endowment insurance policies (partly paid from public funds) which return the principal during years of school attendance, (2) increasing the number of scholarships and other aids to pupils attending schools charging tuition, (3) improving the quality of "state" schools and modifying prejudices against them. The last is believed most promising. It is feared, however, that an attempt to apply these remedies may raise the standard of education held desirable, which would mean competition for schooling on a higher level rather than less pressure on the birth rate. To reduce this danger it is suggested that values be reoriented to take the fascination out of social climbing, and that the social structure be so modified that education does not have to be regarded as determining children's future. How these are to be done is not stated.

For the birth rate to remain at the low point of 1933 or to continue a downward trend is held to be harmful. There is no discussion, however, of the best size for the future population, nor of the birth rate trend which would be desirable in achieving it. Manifestly these topics would require a book for adequate coverage, but they could be dealt with briefly to advantage.

In closing, the authors call attention to the fact that in preparing a program for combating low fertility, the nation will be wise not to concentrate attention on the cost of education, but to give due consideration to other and perhaps more powerful causal factors.

P. K. WHELPTON

ODUM, H. W., MEYER, H. D., HOLDEN, B. S., and ALEXANDER, F. M. *American democracy anew: an approach to the understanding of our social problems.* (New York: Holt. 1940. Pp. vi, 614. $1.40.)

PFIFFNER, J. M. *Research methods in public administration.* (New York: Ronald. 1940. Pp. xv, 447. $4.50.)

PHILLIPS, W. C. *Adventuring for democracy.* (New York: Social Unit Press. 1940. Pp. xvi, 380. $3.)

REID, I. D. A. *The negro immigrant: his background, characteristics and social adjustment, 1899-1937.* (New York: Columbia Univ. Press. 1939. Pp. 261. $3.50.)

This book, which adds another to the many studies of cultural groups migrating to this country, is also important for the contribution which it makes to the growing material about the Harlem section of New York City. Since Harlem has come to exert a vast influence upon our entire negro population, the fact that these immigrants concentrate in large urban centers and especially in Harlem, causes the importance of this migration to be much greater than is indicated by the actual number of people involved.

Although the author shows the great diversity of backgrounds of the people of this area, this immigration is characterized loosely as "West Indian." As the result of growing immigration restrictions against workers in the entire Caribbean area, over-population in some of the islands, and only limited opportunities to use the resources, the worker has looked to the United States for a place in which he might improve his condition.

This group of immigrants, which is made up largely of adult people with an excess of males, and a rather large proportion of skilled workers, is probably faced with a more difficult problem of social adjustment upon entering this country than any other group; for these newcomers are both immigrants and negroes. They are shocked by the attitude of this country with regard to color. Not only do they find inter-racial problems, but also intra-racial conflicts among groups of their own people. It is with these conflicts and problems of social adjustment that the book at hand mainly deals.

Material of this character, which can be secured only through years of study and close contacts with these immigrants, is presented by the author with skill and understanding. The book does not deal directly, however, with certain community problems which arise from a migration of this kind. For example, nothing is said about its effect upon the health of the city. There is no discussion of housing conditions, the indigent family, or the complicated neighborhood situations which have been brought about by this influx of negro and other immigrants from the West Indies. Granted that a study of this kind must be limited in scope, it does seem that these are important social aspects of the migration which must be met and dealt with.

LAWRENCE R. CHENAULT

ROBINSON, T. H., and others. *Men, groups, and the community: a survey in the social sciences.* (New York: Harper. 1940. Pp. xix, 965. $3.50.)

Chapters by eleven members of the School of Social Sciences, Colgate University, designed as a "text for a survey or general introductory course in the field of the social sciences." Among the chapter headings are: "Goods, property, and production"; "Free private enterprise"; "Money and its value"; "Business enterprises"; "The consumers"; "The workers"; "The investors"; "Government lends a hand"; and "Planning is suggested." The volume is profusely illustrated and the text includes many statistical tables. Problems are appended to each chapter, and references to further reading are added.

ROGLER, C. C. *Comerío: a study of a Puerto Rican town.* (Lawrence: Univ. of Kansas Dept. of Journalism Press. 1940. Pp. vi, 198.)

Contains chapters on problems of population and economic life.

SCHLAMM, W. S. *This second war of independence: a call to action.* (New York: Dutton. 1940. Pp. 260. $2.)

STEWART, M. S. *America's children.* (New York: Public Affairs Committee. 1940. Pp. 32. 10c.)

TERESHTENKO, V. J. *The problem of coöperative medicine.* (New York: Co-operative Project. 1940. Pp. 78.)

VAN POLEN, H. *Economic engineering: the master way.* (Boston: Christopher Pub. House. 1940. Pp. 55. $1.25.)

WALKER, W. F. and RANDOLPH, C. R. *Influence of a public health program on a rural community: fifteen years in Rutherford County, Tennessee, 1924-1938.* (New York: Commonwealth Fund. 1940. Pp. 114. 25c.)

WHITE, W. A., editor. *Defense for America.* (New York: Macmillan. 1940. Pp. xx, 205. $1.)

WIRTH, L., editor. *Contemporary social problems: a tentative formulation for teachers of social studies.* 2nd ed. (Chicago: Univ. of Chicago Press. 1940. Pp. ix, 68.)

WOODBURY, R. M. *Methods of family living studies: income—expenditure—consumption.* Stud. and rep., ser. N, no. 23. (Washington: Internat. Labor Office. 1940. Pp. 152. $1.)

YATES, P. L. *Food production in Western Europe: an economic survey of agriculture in six countries. Being the report of an inquiry organized by Viscount Astor and B. Seebohm Rowntree.* (New York: Longmans Green. 1940. Pp. xv, 572. $6.)

Cultural problems in social case work. (New York: Family Welfare Assoc. of America. 1940. Pp. 58. 50c.)

Making consumer education effective: proceedings of the second national conference on consumer education held at Stephens College, Columbia, Missouri, April 1, 2 and 3, 1940. (Columbia, Mo.: Inst. for Consumer Education. 1940. Pp. 253. $1.)

Position of married women in the economic world. (New York: Nat. Fed. of Business and Professional Women's Clubs. 1940. Pp. viii, 69.)

Insurance and Pensions

NEW BOOKS

DAWSON, M. *Problems of workmen's compensation administration in the United States and Canada.* Bull. no. 672. (Washington: Supt. Docs. 1940. Pp. viii, 229. 25c.)

JOSEPH, J. J. *An exploratory memorandum on partial unemployment benefits in the state unemployment compensation systems.* Pamph. ser. no. 4. (Washington: Soc. Sci. Research Council. 1940. Pp. 112. 60c.)

MALISOFF, H. *The emergence of unemployment compensation.* (New York: Academy of Pol. Sci. 1939; 1940.)

Reprints of four articles in *Political Science Quarterly.*

STEWART, M. S. *Pensions after sixty?* Pamph. no. 46. (New York: Public Affairs Committee. 1940. Pp. 32. 10c.)

Economic power: hearings, 76th Cong., 1st Sess., pursuant to Public Resolution

no. 113, 75th Cong. Part 12. *Industrial insurance, August 23-September 7, 1939.* Part 13. *Life insurance, September 11-December 22, 1939.* (Washington: Temporary Nat. Econ. Committee. 1940. Pp. 5594-6361; 6363-7096. 75c., each part.)

Federal old-age and survivors insurance under Title II of the Social Security act as amended effective January 1, 1940. Reg. no. 3. (Washington: Supt. Docs. 1940. Pp. xii, 116. 15c.)

Social security in the United States, 1940. (New York: Am. Assoc. for Social Sec. 1940. Pp. 174. $2.00.)

This is a record of the thirteenth national conference on social security, held in New York, March 29-30, 1940. It includes also a census of social security in the United States. The papers are arranged under the following titles: "Some social and personal problems after 65"; "The continuing problems in unemployment insurance"; "Some fundamental considerations in social security"; "The future in social security."

Unemployment compensation interpretation service. Benefit ser., vol. 3, no. 2. (Washington: Social Security Board. 1940. Pp. 290.)

Pauperism, Charities, and Relief Measures

Applicants for Work Relief: A Study of Massachusetts Families under the FERA and WPA. By Elizabeth W. Gilboy. (Cambridge: Harvard Univ. Press. 1940. Pp. xviii, 273. $3.00.)

Mrs. Gilboy undertakes an evaluation of "work relief" as a means of providing aid for the needy unemployed and their families. Her evaluation is based upon an analysis of the records of a sample of cases receiving work relief under the Emergency Relief Administration and its successor agency, the Works Progress Administration, in Massachusetts, supplemented by secondary data from a number of special studies in other states and localities. Mrs. Gilboy concludes that work relief—an emergency development of the great depression—should be continued as a regular function of government. The case analyses would seem to indicate that, for the most part, persons employed on work projects are, in fact, "employable" and that they are in general the victims of cyclical and technological unemployment, able to work in a competitive labor market when suitable employment opportunity is available.

Mrs. Gilboy advocates a federally controlled work relief system administered with coöperation from state and local agencies, and believes that some modification is needed in the present WPA set-up to provide more equitable allocation of federal funds to localities, more effective coöperation with the public employment services, better planning of projects, more discriminating selection of workers, and more efficient administration.

The major contribution of the book is the analysis of a sample of work relief cases in selected cities and towns of Massachusetts. The sources of data for the bulk of these cases were the ERA application blank or home visit report, and for cases separated from the rolls the dismissal slip. Per-

sonal experience with relief agency case records leads me to have some reservations as to the adequacy of such records for research purposes. The data secured from the records relate to occupation of economic head of case, citizenship, education, size of family, age, sex of economic head, ownership of property, debts or liabilities, total family income, and total family expenditures. Inevitably there must be much incomparability in these data, which were recorded for purposes of eligibility determination and as a basis for providing service rather than for purposes of scientific study. The author is fully aware of the inadequacies of the basic data, but in the light of these inadequacies attaches more significance than the reviewer would be inclined to do to differences among the cities and towns in the characteristics of recipients. The extent of the "no report" items is not always clear. Many of the tables do not indicate the number of cases upon which derived percentages or averages are based. In analyzing cases separated from WPA rolls (cancelled cases) a sample of 408 cases was selected, for only 279 of which data were available on reason for separation. The distribution of known reasons for separation for this group may be subject to considerable bias, since the cases for which reason for separation is unknown are likely to have been predominantly cases returning to private employment.

ANNE E. GEDDES

Washington, D.C.

NEW BOOKS

ABBOTT, E. *Public assistance.* Vol. I. *American principles and policies: in five parts, with select documents.* (Chicago: Univ. of Chicago Press. 1940. Pp. xviii, 894. $4.50.)

In this book Miss Abbott adds another volume to the impressive list of studies of American social problems which she and her distinguished colleagues have produced. In the preface she states that the book is not a history of public assistance, and that it is written particularly for social workers. No doubt both these statements are true, but as one reads the text one gets a very good idea of the historical setting of our major welfare problems, and one is aware of the passion and insight of a great scholar and teacher whose influence extends beyond the walls of the classroom and whose message is timely for the intelligent layman as well as for the professional expert.

The book is divided into five sections which deal respectively with "The principle of public responsibility," "The old poor law in the twentieth century," "Local responsibility and medical care," "State grants-in-aid for public assistance," and "Federal aid and emergency relief." Under each section are presented a group of selected documents and articles introduced by Miss Abbott's illuminating statement of the problems dealt with, thus combining in one volume a well selected list of readings with a cogent commentary.

A casual glance at the table of contents might give the impression that the interest of the volume is centered in the legal aspects of public assistance as expressed in legislation and judicial opinions. Nothing could be farther from the truth. The argument of the book, cumulatively developed in almost 900 pages, drives home the poignant need for a reform of our un-American poor

laws. The record presented of the past decade demonstrates the limitations of the local unit in both finance and administration. Case after case drawn from court decisions should convince even the most prejudiced reader that decisions which affect vitally the lives of thousands of citizens should be made by intelligent and sympathetic social workers on the basis of practical and human considerations, rather than by inexpert elected officials bound by legal technicalities and local parsimony. In Miss Abbott's words:

"To abolish or re-write the old pauper laws is the only method that will bring our oldest form of social security in line with our modern social welfare program." Until drought and unemployment had created a crisis "public relief had been our oldest American tradition. Our Puritan and Virginian ancestors alike brought with them the principle of the compulsory collection of poor relief funds when they came to found the Atlantic Coast settlements in the early seventeenth century. This has been regarded as an American principle and continued down to the present day. The depression furnished further evidence that adequate relief could be secured only through a public relief system, and the experience of these years made clear the need for state funds and for a state administrative authority to supplement the inadequate funds of the minor local authorities and to standardize on a higher level the methods of relief-giving of a large number of local authorities in a single state."

HELEN FISHER HOHMAN

GLICK, F. Z. *The Illinois Emergency Relief Commission: a study of administrative and financial aspects of emergency relief.* (Chicago: Univ. of Chicago Press. 1940. Pp. 262. $1.)

Socialism and Coöperative Enterprises

NEW BOOKS

BAKKEN, H. H. *Coöperation to the Finnish.* (Madison: Mimir. 1939. Pp. x, 220. $2.50.)

History of coöperatives in Finland.

BLANKERTZ, D. F. *Marketing coöperatives.* (New York: Ronald. 1940. Pp. xiv, 488. $4.)

A detailed description of different forms of coöperative organizations, including consumer farmers' coöperatives, credit unions, mutual insurance companies, housing societies and college coöperatives.

LAMONT, C. *You might like socialism: a way of life for modern man.* (New York: Modern Age Books. 1939. Pp. x, 308. 95c.)

Mr. Lamont, a scion of a banker's family, has written a fervent plea for a socialist society. He is decidedly a left-winger within the socialist movement, yet he is not a fanatic, and he is evidently free from the twisted emotions which so often drive socialists of bourgeois descent to extreme attitudes in an attempt to escape from self-blame for not having been born in the right class.

The exposition of socialist economics brings nothing essentially new, but neither is it open to any objection of importance from the viewpoint of the professional economist, which is more than one can say of most popular books on socialism. The author's interest lies mainly in philosophy and general culture analysis, and here he has some thought-provoking things to say.

With the spirit of Mr. Lamont's book every unprejudiced reader must be in sympathy, and this reviewer, for one, extends the sympathy to the author's ultimate aims; but events have dealt cruelly with his historical illusions. For Mr. Lamont, as for many others, fascism was essentially a product of capitalist conspiracy, the sole serious cause of war was the capitalist order, and the Soviet Union, safely on her way to internal democracy, was a protagonist of collective security and the self-determination of peoples, large and small. It would be unjust to blame Mr. Lamont, whose book went to the press in August, 1939, for not having foreseen all that happened in the following months, but even in 1939 it would have been possible to avoid some of the more serious misinterpretations and over-simplifications in Mr. Lamont's analysis of international politics.

CARL LANDAUER

LEONTIEV, A. *Political economy.* (London: Lawrence and Wishart. 1939. Pp. 285. 2s. 6d.)

Communist economics.

LEROSSIGNOL, J. E. *From Marx to Stalin: a critique of communism.* (New York: Crowell. 1940. Pp. x, 442. $3.)

RALL, U. *Coöperative rural electrification in the United States.* Ser. on coöperatives no. 15. (Washington: Pan American Union. 1940. Pp. 33.)

Statistics and Its Methods

NEW BOOKS

ARKIN, H. and COLTON, R. R. *Graphs: how to make and use them.* Rev. ed. (New York: Harper. 1940. Pp. xvi, 236. $3.)

BERNSTEIN, B. *The pattern of consumer debt, 1935-36: a statistical analysis.* Stud. in consumer instal. finan. 6. (New York: Nat. Bur. of Econ. Research. 1940. Pp. xviii, 237. $2.50.)

PETERS, C. C. and VAN VOORHIS, W. R. *Statistical procedures and their mathematical bases.* (New York and London: McGraw-Hill. 1940. Pp. xiii, 516. $4.50.)

Designed to "bridge the gap between elementary courses in which the formulas are given from a purely authoritative viewpoint, and the original monographic contributions which are so often highly mathematical in character. The authors bring together and synthesize the classical statistics and the new developments worked out by R. A. Fisher. The book explains mathematical derivations and their use from the standpoint of the student with little prior mathematical training."

New retail price index numbers, 1938. (Pretoria: Govt. Printing Office. 1939. Pp. 35. 6d.)

PERIODICALS

General Works, Theory and Its History

ADARKAR, B. P. *Interpersonal comparisons of utility.* Indian Jour. Econ., Apr., 1940. Pp. 18.

ANDERSON, M. D. *Dynamic theory of employment.* So. Econ. Jour., July, 1940. Pp. 14.

ARIAS, G. *Recientes interpretaciones de la teoría de los costos comparados.* Rev. de Econ. y Estat., año ii, no. 1, 1940. Pp. 15.

BERNSTEIN, E. M. *War and the pattern of business cycles.* Am. Econ. Rev., Sept., 1940. Pp. 11.

BHATANAGAR, B. G. *Scope of economics.* Indian Jour. Econ., Apr., 1940. Pp. 3.

BHATIA, B. *The method of study.* Indian Jour. Econ., Apr., 1940. Pp. 8.

BHIDE, H. B. *Scope of economics.* Indian Jour. Econ., Apr., 1940. Pp. 10.

BITTERMANN, H. J. *Adam Smith's empiricism and the law of nature.* I. Jour. Pol. Econ., Aug., 1940. Pp. 34.

BRONFENBRENNER, M. *The Keynesian equations and the balance of payments.* Rev. Econ. Stud., June, 1940. Pp. 5.

BROWN, W. M. *Some effects of a minimum wage upon the economy as a whole—reply to Messrs. Mikesell, Hagen and Sufrin.* Am. Econ. Rev., Sept., 1940. Pp. 2.

CAPLAN, B. *Reinvestment and the rate of interest.* Am. Econ. Rev., Sept., 1940. Pp. 8.

CHANDRA, M. *Scope and method of economics.* Indian Jour. Econ., Apr., 1940. Pp. 4.

CHOPRA, V. K. *The scope of economics.* Indian Jour. Econ., Apr., 1940. Pp. 15.

COASE, R. H. and FOWLER, R. F. *The analysis of producers' expectations.* Economica, Aug., 1940. Pp. 13.

CRANFILL, S. E. *Recent contributions of John R. Commons to economic thought.* So. Econ. Jour., July, 1940. Pp. 17.

DALY, M. C. *An approximation to a geographical multiplier.* Econ. Jour., June-Sept., 1940. Pp. 11.

DATTA, B. *The continuity-assumption in economic analysis.* Indian Jour. Econ., Apr., 1940.

DOW, J. C. R. *A theoretical account of futures markets.* Rev. Econ. Stud., June, 1940. Pp. 11.

DOWDELL, E. G. *The multiplier.* Oxford Econ. Papers, Sept., 1940. Pp. 16.

FELLNER, W. and ELLIS, H. S. *Hicks and the time-period controversy.* Jour. Pol. Econ., Aug., 1940. Pp. 16.

FLOOD, M. M. *Recursive methods in business-cycle analysis.* Econometrica, Oct., 1940.

GOPAL, M. H. *The return to classicism and after.* Indian Jour. Econ., Apr., 1940. Pp. 17.

GOVINDAROW, B. *Scope and method of economics.* Indian Jour. Econ., Apr., 1940. Pp. 9.

HAAVELMO, T. *The inadequacy of testing dynamic theory by comparing theoretical solutions and observed cycles.* Econometrica, Oct., 1940. Pp. 10.

HAGEN, E. E. *Elasticity of demand and a minimum wage.* Am. Econ. Rev., Sept., 1940.

HANEY, L. H. *Professor Bowman's review of Value and Distribution.* Am. Econ. Rev., Sept., 1940. Pp. 2.

HONJO, E. *The economic thought in the middle period of the Tokugawa era.* Kyoto Univ. Econ. Rev., Apr., 1940. Pp. 33.

HUDSON, P. G. *Principles of economics prerequisite to courses in public finance.* Am. Econ. Rev., Sept., 1940. P. 1.

HUTT, W. H. *The concept of consumers' sovereignty.* Econ. Jour., Mar., 1940. Pp. 12.

JASTRAM, R. W. *Economic welfare: a comment.* Econ. Jour., Mar., 1940. Pp. 2.

JOSHI, T. M. *The functions of economic analysis.* Indian Jour. Econ., Apr., 1940. Pp. 6.

KALDOR, N. *A model of the trade cycle.* Econ. Jour., Mar., 1940. Pp. 15.

————. *A symposium on the theory of the forward market* (with remarks by R. G. Hawtrey and J. G. R. Dow). Rev. Econ. Stud., June, 1940. Pp. 12.

KALECKI, M. *The short-term rate and the long-term rate.* Oxford Econ. Papers, Sept., 1940.

KARWAL, G. D. *The scope of economics—economics and practice.* Indian Jour. Econ., Apr., 1940. Pp. 11.

KNIGHT, F. H. *Professor Parsons on economic motivation* (with reply by Talcott Parsons). Canadian Jour. Econ. and Pol. Sci., Aug., 1940. Pp. 13.

LANZILLO, A. *Evolución del pensamiento económico europeo después de Ricardo.* Rev. de Econ. y Estat., año ii, no. 1, 1940. Pp. 32.

MALHOTRA, P. C. *Scope of economics: a discussion of the relation between economics and ethics.* Indian Jour. Econ., Apr., 1940. Pp. 8.

MEHTA, J. K. *The scope of economics.* Indian Jour. Econ., Apr., 1940. Pp. 10.

MIKESELL, R. F. *A note on the effects of minimum wages on the propensity to consume.* Am. Econ. Rev., Sept., 1940. P. 1.

MIRKOWICH, N. *Schumpeter's theory of economic development.* Am. Econ. Rev., Sept., 1940. P. 1.

PAPI, G. U. *Les conditions de l'équilibre entre l'économie et l'activité financière.* Rev. des Sci. Econ. et Finan., Apr.-June, 1940. Pp. 20.

PINNEY, H. *The institutional man.* Jour. Pol. Econ., Aug., 1940. Pp. 20.

PRASAD, P. S. N. *Economics and political economy.* Indian Jour. Econ., Apr., 1940. Pp. 20.

QURESHI, A. I. *The scope of economics.* Indian Jour. Econ., Apr., 1940. Pp. 10.

ROLL, E. *The social significance of recent trends in economic theory.* Canadian Jour. Econ. and Pol. Sci., Aug., 1940. Pp. 12.

RÖPKE, W. *Streifzüge durch die neure konjunkturtheoretische Literatur.* Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhrg., 1 Heft, 1940. Pp. 13.

ROY, P. *On Marshall's statics and dynamics.* Indian Jour. Econ., Apr., 1940. Pp. 11.

SAMAD, S. A. *The relativity of economic phenomena.* Indian Jour. Econ., Apr., 1940.

SAMUELSON, P. A. *The theory of pump-priming reëxamined.* Am. Econ. Rev., Sept., 1940. Pp. 15.

DE SCITOVSKY, T. *A study of interest and capital.* Economica, Aug., 1940. Pp. 25.

SHAW, E. S. *Elements of a theory of inventory.* Jour. Pol. Econ., Aug., 1940. Pp. 21.

STIGLER, G. J. *Notes on the theory of duopoly.* Jour. Pol. Econ., Aug., 1940. Pp. 21.

WHITTAKER, E. *Wealth and welfare.* Am. Econ. Rev., Sept., 1940. Pp. 3.

WILSON, T. *Capital theory and the trade cycle.* Rev. Econ. Stud., June, 1940. Pp. 11.

WOLFE, A. B. *"Full utilization," equilibrium, and the expansion of production.* Quart. Jour. Econ., Aug., 1940. Pp. 27.

ZINGLER, E. K. *Advertising and the maximisation of profit.* Economica, Aug., 1940. Pp. 4.

Emil Lederer, 1882-1939. I. The sociologist. Soc. Research, Sept., 1940. Pp. 22.

Economic History and Geography

CLARK, D. M. *The American board of customs, 1767-1783.* Am. Hist. Rev., July, 1940. Pp. 30.

CRIPPS, S. *Japan's economic position.* Asia, Aug., 1940.

GILBERT, J. C. *Anglo-French financial coöperation during the war, 1914-18.* Rev. Econ. Stud., June, 1940. Pp. 10.

GRAY, S. and WYCKOFF, V. J. *The international tobacco trade in the seventeenth century.* So. Econ. Jour., July, 1940. Pp. 26.

HESTER, E. D. *Footnotes to Philippine economics.* Philippine Soc. Sci. Rev., May, 1940. Pp. 11.

KESTER, R. B. *The War Industries Board, 1917-1918; a study in industrial mobilization.* Am. Pol. Sci. Rev., Aug., 1940. Pp. 30.

TREXLER, H. A. *The opposition of planters to the employment of slaves as laborers by the Confederacy.* Miss. Valley Hist. Rev., Sept., 1940. Pp. 14.

Agriculture, Mining, Forestry, and Fisheries

BARKER, P. W. *Rubber—a strategic raw material.* Domestic Comm. Weekly, Sept. 5, 1940.

BARNETT, P. G. *Southeast Asia increases iron exports to Japan.* Far East. Survey, July 3, 1940. Pp. 3.

BAUER, P. T. *Rubber and foreign exchange.* Econ. Jour., June-Sept., 1940. Pp. 11.
BEHRE, C. H., JR. *Mineral economics and world politics: a review.* Geograph. Rev., Oct., 1940. Pp. 3.
BLACK, J. D. *Dr. Schultz on farm management research.* Jour. Farm Econ., Aug., 1940. Pp. 11.
———. *Training and recruitment of agricultural economic personnel.* V. *For public service.* Jour. Farm Econ., Aug., 1940. Pp. 2.
BLOCH, K. *American cotton in the Far East.* Far East. Survey, Oct. 9, 1940. Pp. 7.
———. *Tin output and stocks continue to mount.* Far East. Survey, Sept. 25, 1940.
———. *The United States stocks up on rubber.* Far East. Survey, Aug. 14, 1940. Pp. 3.
BUNCE, A. C. *Time preference and conservation.* Jour. Farm Econ., Aug., 1940. Pp. 11.
CANNELLE, M. L. *La existencia de petróleo y su probable duración.* Rev. di Ciencias Econ., April, 1940. Pp. 8.
CLAYTON, W. L. *The world cotton situation.* Vital Speeches, Sept. 1, 1940. Pp. 4.
CLENDENIN, J. C. *Crop insurance—an experiment in farm-income stabilization.* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 9.
COOPER, T. *Training and recruitment of agricultural economic personnel.* IV. *A training program.* Jour. Farm Econ., Aug., 1940. Pp. 2.
DAWSON, O. L. *Philippine agriculture—a problem of adjustment.* Foreign Agric., July, 1940. Pp. 46.
DIEBOLD, W., JR. *Oil import quotas and "equal treatment."* Am. Econ. Rev., Sept., 1940.
FOWKE, V. C. *Dominion aids to wheat marketing, 1929-39.* Canadian Jour. Econ. and Pol. Sci., Aug., 1940. Pp. 13.
HALLIDAY, I. G. *Some notes on the distribution of meat in Durban, with special reference to beef.* So. African Jour. Econ., Mar., 1940. Pp. 18.
HILL, F. F. *Training and recruitment of agricultural economic personnel.* VI. *An administrator's view.* Jour. Farm Econ., Aug., 1940. Pp. 6.
HOTSON, R. P. *Canada's mineral wealth.* Canadian Banker, Oct., 1940. Pp. 9.
HUBBARD, D. A. *Mexican oil for Japan?* Far East. Survey, July 17, 1940. Pp. 2.
HUTT, W. H., et al. *Economists' protest—the operation of the wheat marketing scheme, 1938-1939: memorandum of objections.* So. African Jour. Econ., Mar., 1940. Pp. 14.
JANSSEN, W. A. *Tin—an all-important strategic material.* Domestic Comm. Weekly, Sept. 12, 1940. Pp. 6.
LADEJINSKY, W. *Agriculture of the Netherlands Indies.* Foreign Agric., Sept., 1940. Pp. 64.
MCNALL, P. E. *Economic phases in soil erosion control.* Jour. Farm Econ., Aug., 1940. Pp. 8.
MABBUN, P. N. *The place of farmers' coöperatives in our national economy.* Philippine Soc. Sci. Rev., May, 1940. Pp. 5.
MANCHESTER, H. *Rubber out of oil.* Harper's, Sept., 1940.
MEHL, P. *Trading in wheat and corn futures in relation to price movements.* Jour. Farm Econ., Aug., 1940. Pp. 12.
MIGHELL, R. L. and ALLEN, R. H. *Supply schedules—"long-time" and "short-time."* Jour. Farm Econ., Aug., 1940. Pp. 14.
MINNEMAN, P. G. and DAVIS, C. L. *Netherlands agriculture and the war.* Foreign Agric., Aug., 1940. Pp. 34.
NYHUS, P. O. *The hog industry in Argentina.* Foreign Agric., Aug., 1940. Pp. 15.
PASSERINI, A. *Economia agraria.* Riv. Internaz. di Sci. Soc., May, 1940. Pp. 20.
PORTER, C. *Philippines planning big rubber development.* Far East. Survey, Oct. 9, 1940.
SALTER, L. A., JR. and DIEHL, L. F. *Part-time farming research.* Jour. Farm Econ., Aug., 1940. Pp. 20.
SARLE, C. F. *Training and recruitment of agricultural economic personnel.* VII. *The government service as a career.* Jour. Farm Econ., Aug., 1940. Pp. 3.
SHARP, M. W. *Allied wheat buying in relationship to Canadian marketing policy, 1914-18.* Canadian Jour. Econ. and Pol. Sci., Aug., 1940. Pp. 18.
TAYLOR, H. C. *The farmer in the groupistic regime.* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 9.

THAYER, J. M., JR. *Raw materials for national defense.* Conf. Bd. Econ. Record, July 10, 1940. Pp. 9.

TORGERSON, H. W. II. *Agricultural finance in the United States.* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 7.

TYLER, P. M. *Minerals and war.* Harvard Bus. Rev., Autumn, 1940. Pp. 13.

WILDE, P. S., JR. *El derecho internacional y el petróleo mexicano.* El Trimestre Econ., July-Sept., 1940. Pp. 20.

Natural gas. Fortune, Aug., 1940.

Manufacturing Industries

BAILEY, A. H. *Flour milling in Canada.* Canadian Banker, July, 1940. Pp. 13.

DEMARIA, G. *Industria e commercio.* Riv. Internaz. di Sci. Soc., May, 1940. Pp. 52.

GAINSBRUGH, M. R. *Manufacturing resources for defense.* Conf. Bd. Econ. Record, Oct. 3, 1940. Pp. 6.

HANSEN, H. E. *Industry's current ability to produce for national defense.* Conf. Bd. Econ. Record, July 10, 1940. Pp. 8.

KRISHNASWAMI, G. V. *The size of Indian cotton mills in 1936.* Sankhyā, Indian Jour. Stat., Mar., 1940. Pp. 5.

LONGANECKER, D. *Machine tools—indispensable in peace or war.* Domestic Comm. Weekly, Sept. 19, 1940. Pp. 5.

MILLER, S. L. *Shipbuilding industry needs new capacity to handle all the business offered.* Annalist, July 25, 1940.

TERBORGH, G. *Present position of the durable goods inventory.* Fed. Res. Bull., Oct., 1940.

——————. *The problem of manufacturing capacity.* Fed. Res. Bull., July, 1940. Pp. 8.

ZIERER, C. M. *The Australian iron and steel industry as a functional unit.* Geograph. Rev., Oct., 1940. Pp. 11.

British and German steel supplies. Economist (London), June 29, 1940.

Phonograph records—recovery in the musical reproduction business. Index, N.Y. Trust Co., Autumn, 1940. Pp. 8.

Production in war time. Bull. Canterbury Chamber of Comm., July, 1940. Pp. 4.

The rise in the federal reserve index of production. Fed. Res. Bull., Oct., 1940. Pp. 3.

Synthetic rubber. Fortune, Aug., 1940.

Transportation and Communication

BARRIGER, J. W., III, et al. *Railroad reorganization.* Law and Contemp. Problems, Summer, 1940. Pp. 175.

BLACK, R. F. *Wheels for defense.* Harvard Bus. Rev., Autumn, 1940. Pp. 7.

BORG, D. *China turns to old and new forms of highway transport.* Far East. Survey, Sept. 25, 1940. Pp. 2.

DOUGALL, H. E. and FARWELL, L. C. *A review of railroad financing, 1920-1938.* II. *Types and methods of financing.* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 12.

FARLEY, M. S. *Shipping storage handicaps Japanese expansion plans.* Far East. Survey, Sept. 25, 1940. Pp. 2.

GUTSCHE, H. *Die Gliederung der Erfolgsrechnung bei den nordamerikanischen Eisenbahnen.* Archiv f. Eisenbahnw., July-Aug., 1940. Pp. 38.

MECK, J. F., JR. *Railroad leases and reorganization.* II. Yale Law Jour., June, 1940, Pp. 22.

PASCHEN, W. *Verkehrs- und Wirtschaftsfragen Argentiniens.* Archiv f. Eisenbahnw., July-Aug., 1940. Pp. 38.

VON RENESSE, O. *Die nationale Gesellschaft der belgischen Eisenbahnen in den Jahren 1937 und 1938.* Archiv f. Eisenbahnw., July-Aug., 1940. Pp. 20.

SOMMERICH, J. *New air service to Alaska follows line of hemisphere defense.* Far East. Survey, July 17, 1940. Pp. 2.

STAMP, LORD. *The weight of consignments in transport.* Econ. Jour., June-Sept., 1940.

TAJANI, F. *Trasporti.* Riv. Internaz. di Sci. Soc., May, 1940. Pp. 7.

TALIAFERRO, E. S. *Are the railroads "prepared"?* Barron's, July 29, 1940.

Trade, Commerce, and Commercial Crises

BEVERIDGE, W. *The trade cycle in Britain before 1850: a postscript.* Oxford Econ. Papers, Sept., 1940. Pp. 14.
BRANDT, W. *The United States, China, and the world market.* Pacific Affairs, Sept., 1940. Pp. 41.
DOUGLAS, M. *The place of barter in international affairs.* Canadian Banker, July, 1940. Pp. 12.
GHOSH, D. C. *The statistical estimate of internal trade.* Sankhyā, Indian Jour. Stat., Mar., 1940. Pp. 4.
KOLLER, H. F. *Banking opportunities in Latin American trade.* Bankers Mag., Sept., 1940.
KURIHARA, K. *Economic nationalism in the Philippines.* Philippine Soc. Sci. Rev., May, 1940. Pp. 6.
KYRKILITSIS, A. *La guerre et la vie économique internationale.* Rev. des Sci. Econ. et Finan., Apr.-June, 1940. Pp. 13.
LEWIS, E. M. R. and KILLER, K. W. *Notes on the balances of payments of the British and French Empires with non-sterling countries.* Econ. Record, June, 1940. Pp. 5.
PORTER, C. *Philippine trade returns disclose lag in planning.* Far East. Survey, July 3, 1940.
RANDERSON, H. R. *Import reduction and Australia's war effort.* Econ. Record, June, 1940. Pp. 16.
ROBERTSON, C. J. *Monoexport in Africa.* So. African Jour. Econ., Mar., 1940. Pp. 18.
ROTH, A. *War leads to sharp rise in Soviet-U.S. trade.* Far East. Survey, Oct. 9, 1940. Pp. 2.
ROVENSKY, J. C. *The outlook for foreign trade.* Bankers Mag., Oct., 1940. Pp. 3.
SASTRI, N. S. R. and MATHEW, N. T. *Trends of foreign trade of India during the past sixty years.* Sankhyā, Indian Jour. Stat., Mar., 1940. Pp. 12.
SMITH, R. G. *Latin American trade responsibilities.* Bankers Mag., Sept., 1940. Pp. 3.
STANLEY, A. O. *Latin-American trade winds—1940.* Dun's Rev., Aug., 1940. Pp. 2.
Administration of the United States export control. Foreign Comm. Weekly, Oct. 5, 1940.
Foreign trade under war conditions—some economic aspects affecting the United States. Index, N.Y. Trust Co., Autumn, 1940. Pp. 15.
The trend of business in New Zealand. Bull. Canterbury Chamber of Comm., June, 1940.
Value and quantity of cotton imports in Shanghai. Chinese Econ. and Stat. Rev., July, 1940. P. 1.

Accounting, Business Methods, Investments, and the Exchanges

BAILEY, G. D. *The research work of the American Institute of Accountants.* Jour. Accountancy, July, 1940. Pp. 8.
BAKER, J. C. *Stock options for executives.* Harvard Bus. Rev., Autumn, 1940. Pp. 17.
BARNES, I. R. I. *Shall going value be included in the rate-base?* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 8.
BATES, G. E. *The board of directors.* Harvard Bus. Rev., Autumn, 1940. Pp. 16.
BENNETT, C. W. *The Alachusetts cotton mills.* N.A.C.A. Bull., sec. i, Aug. 1, 1940. Pp. 40.
BOWER, M. *Gearing a business for national defense.* Harvard Bus. Rev., Autumn, 1940.
BRADLEY, W. L. *Audits of agricultural coöperatives.* Jour. Accountancy, July, 1940. Pp. 8.
CHAMBERS, J. L. *Some purposes and principles of government accounting.* Jour. Accountancy, Aug., 1940. Pp. 7.
CHERNE, L. M. *Management problems of mobilization.* Advanced Manag., July-Sept., 1940.
COCHRANE, G. et al. *A statement to the S.E.C. on professional disciplinary procedures.* Jour. Accountancy, July, 1940. Pp. 6.
DICKENS, P. D. *European investments in the United States.* Foreign Comm. Weekly, Oct. 5, 1940. Pp. 2.
DOHR, J. L. *Some reservations on the State Street Trust Company case.* Jour. Accountancy, Sept., 1940. Pp. 7.
DONHAM, R. *Management consultants deal with people.* Harvard Bus. Rev., Autumn, 1940.

DRUCKER, P. F. *Europe's changing economic structure: three major long-run problems.* Annalist, Aug. 1, 1940.

EITEMAN, W. J. *Common stocks as long-run investments.* Annalist, Sept. 12, 1940.

——————. *Security regulation and the volume of new issues.* So. Econ. Jour., July, 1940. Pp. 10.

EPPSTON, H. A. *Accounting in evolution.* Jour. Accountancy, Aug., 1940. Pp. 7.

FARNHAM, J. *Speeding up collections by air.* Bankers Mag., July, 1940. Pp. 3.

FICK, K. *Nonexpanding economy and profit sharing.* Jour. Accountancy, July, 1940. Pp. 10.

FREUND, G. and SPODICK, F. *A portfolio policy for government securities.* Bankers Mag., Sept., 1940. Pp. 4.

GEORGE, E. B. *Uncle Sam goes to market—a summary of the organization of federal purchasing and procurement.* Dun's Rev., Aug., 1940. Pp. 21.

GOLDEN, C. S. *The economic effects of cost reductions.* Advanced Manag., July-Sept., 1940.

GORDON, H. A. *The balance sheet from a banker's viewpoint.* Canadian Banker, July, 1940.

GUTHMANN, H. G. *The effect of the undistributed profits tax upon the distribution of corporate earnings: a note.* Econometrica, Oct., 1940. Pp. 3.

HASKELL, R. R. and ROBNETT, R. H. *Some applications of duplicating methods in the preparation of payroll records.* N.A.C.A. Bull., sec. i, July 15, 1940. Pp. 26.

HERRICK, A. *Approaches to budgetary control in the dairy industry.* Jour. Accountancy, July, 1940. Pp. 7.

HOLTHAUSEN, D. M., MERRIAM, M. L. and NUGENT, R. *The volume of consumer instalment credit, 1929-1938.* Nat. Bur. Econ. Res. Bull., Sept. 1, 1940. Pp. 12.

KAHN, A. E. *Fundamental deficiencies of the American patent law.* Am. Econ. Rev., Sept., 1940. Pp. 17.

KESTNBAUM, M. *A study in management prerogatives.* Harvard Bus. Rev., Autumn, 1940. Pp. 11.

KLEIN, F., WOODHAM, R. M. and LOTHROP, E. O. *Accounting problems on government contracts.* N.A.C.A. Bull., sec. i, July 1, 1940. Pp. 22.

LONGMAN, D. R. *Distribution costs—a new frontier for accounting.* Jour. Accountancy, Sept., 1940. Pp. 6.

MCGREGOR, D. *"Motives" as a tool of market research.* Harvard Bus. Rev., Autumn, 1940. Pp. 10.

MCINTYRE, F. *The effect of the undistributed profits tax: a reply.* Econometrica, Oct., 1940.

MADDEN, J. T. and BACKMAN, J. *Public utility holding company common stocks.* Jour. Bus. Univ. Chicago, pt. 1, July, 1940. Pp. 21.

MERCADER, G. R. *Audit in Mexico.* Jour. Accountancy, Aug., 1940. Pp. 7.

MITCHELL, R. V. *Rural retailing trends in Illinois, 1926-1938.* Dun's Rev., Sept., 1940.

MITCHELL, W., JR. *Benchmarks of profitable operation in 50 retail trades.* Dun's Rev., Oct., 1940. Pp. 6.

MURPHY, M. E. *The British accountancy profession and the war.* Jour. Accountancy, July, 1940. Pp. 4.

MURRAY, C. H. *The development of a sound public relations program in industry.* Advanced Manag., July-Sept., 1940. Pp. 6.

MUSSELMAN, D. P. *On the nature of the gain on Treasury stock.* Jour. Accountancy, Aug., 1940. Pp. 13.

MYRICK, D. *The volume of unreported trading in New York Stock Exchange stocks.* Annalist, Aug. 1, 1940.

PANUCH, J. A. *Investor protection in reorganization.* Harvard Bus. Rev., Autumn, 1940. Pp. 11.

PERRY, W. E. *Case study of a standard cost system.* N.A.C.A. Bull., sec. i, Sept. 1, 1940. Pp. 25,

PINSON, W. B. *Payroll accounting for construction contractors.* Jour. Accountancy, Oct., 1940. Pp. 3.

RENNER, R. R. *The normal base stock method—a case history.* N.A.C.A. Bull., sec. i, Oct. 1, 1940. Pp. 24.

SHORT, F. G. *Internal control from the viewpoint of the auditor.* Jour. Accountancy, Sept., 1940. Pp. 7.

STEMPF, V. H. *Reports of independent certified public accountants.* Jour. Accountancy, Aug., 1940. Pp. 11.
STEVENS, W. H. S. *The Federal Trade Commission's contribution to industrial and economic analysis: the work of the economic division.* Geo. Washington Law Rev., Jan.-Feb., 1940. Pp. 36.
———. *Participating debt versus other securities in capital structure readjustments.* Georgetown Law Jour., May, 1940. Pp. 21.
SUTCH, W. B. *Marketing and price control in New Zealand.* Econ. Record, June, 1940. Pp. 10.
VANNAIS, L. E. *Punched card accounting from the audit viewpoint.* I, II. Jour. Accountancy, Sept., Oct., 1940. Pp. 18, 18.
WARNER, S. W. *Production and inventory control.* N.A.C.A. Bull., sec. i, Sept. 15, 1940. Pp. 23.
WATERS, L. W. *Industrial research in your own business.* Dun's Rev., Sept., 1940. Pp. 5.
WELLINGTON, C. O. *Experiences with extensions of auditing procedure for inventories.* Jour. Accountancy, July, 1940. Pp. 12.
WHITNEY, W. H. *What is a balance-sheet?* Jour. Accountancy, Oct., 1940. Pp. 16.
WOLFF, R. P. *The rise of the super-market and some marketing consequences.* Dun's Rev., Sept., 1940. Pp. 8.
Accounting features of the investment company act of 1940—a summary. Jour. Accountancy, Oct., 1940. Pp. 3.
American Institute of Accountants—trial board. Jour. Accountancy, July, 1940. P. 1.
Internal control—a panel discussion. N.A.C.A. Bull., sec. i, Aug. 15, 1940. Pp. 25.
Inventories—a tentative statement. Jour. Accountancy, Oct., 1940. Pp. 12.
Profitless prosperity for the aircrafts? Finan. World, July 10, 1940.

Capital and Capitalistic Organization

KING, W. I. *Laissez faire versus governmental control of industry.* Soc. Sci., July, 1940.
PEGRUM, D. F. *The public corporation as a regulatory device.* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 9.
PELTZER, E. *Industrialization of young countries and the change in the international division of labor.* Soc. Research, Sept., 1940. Pp. 27.
ROTTSCHAEFER, H. *The Constitution and a "planned economy."* Michigan Law Rev., June, 1940. Pp. 32.
WENSLEY, A. J. and FLORENCE, P. S. *Recent industrial concentration, especially in the Midlands.* Rev. Econ. Stud., June, 1940. Pp. 20.

Labor and Labor Organizations

ALLEN, R. G. D. *The unemployment situation at the outbreak of war* (with discussion). Jour. Royal Stat. Soc., pt. ii, 1940. Pp. 27.
ANDREWS, E. F. *National defense and federal labor laws.* Dun's Rev., Aug., 1940. Pp. 3.
BHATIA, A. C. *Labour unrest in India.* Indian Jour. Econ., Apr., 1940. Pp. 13.
BROWER, F. B. *Structure of annual wage plans, elements of success or failure.* Advanced Manag., July-Sept., 1940. Pp. 7.
BROWNE, H. F. *Skilled labor: a vital link in the defense program.* Conf. Bd. Econ. Record, July 10, 1940.
DEIBERT, A. W. *Meeting the hours problem.* Bankers Mag., July, 1940. Pp. 4.
DESSAUER-MEINHARDT, M. *Monthly unemployment records, 1854-1892.* Economica, Aug., 1940. Pp. 5.
EZEKIEL, M. *Productivity, wage rates, and employment.* Am. Econ. Rev., Sept., 1940. Pp. 17.
HERZ, E. and BESSLING, I. *National service and contracts of employment.* Internat. Lab. Rev., July, 1940. Pp. 28.
HILLMAN, S. *Labor's rôle in national defense.* Lab. Inf. Bull., Sept., 1940. Pp. 4.
HINRICHS, A. F. and BRENNER, H. *Trends of manufacturing employment, 1929 to 1937.* Mo. Lab. Rev., June, 1940. Pp. 32.

JENSEN, A. M. *A new frontier for the unemployed.* Social Educ., Oct., 1940. Pp. 3.
KUENZLI, I. R. *The American Federation of Teachers.* Lab. Inf. Bull., July, 1940. Pp. 3.
LEISERSON, W. M. *Improvement of employer-employee relations.* Conf. Bd. Manag. Record, Aug., 1940.
LOKANATHAN, P. S. *Industrial disputes and legislation.* Indian Jour. Econ., Apr., 1940.
MAKOWER, H., MARSCHAK, J. and ROBINSON, H. W. *Studies in mobility of labour: analysis for Great Britain.* II. Oxford Econ. Papers, Sept., 1940. Pp. 24.
MALLIK, A. N. *Labour problems and labour legislation in India (with special reference to the railway industry).* Indian Jour. Econ., Apr., 1940. Pp. 31.
NARAYANASWAMI, B. V. *Industrial disputes and their settlement.* Indian Jour. Econ., Apr., 1940. Pp. 7.
NIXON, R. A. and SAMUELSON, P. A. *Estimates of unemployment in the United States.* Rev. Econ. Stat., Aug., 1940. Pp. 11.
PADWAY, J. A. *Shackling labor by legislation.* Am. Fed., Aug., 1940. Pp. 3.
PERLO, V. *Unit labor cost in 20 manufacturing industries, 1919 to 1939.* Mo. Lab. Rev., July, 1940. Pp. 5.
PRENTIS, H. W., JR. *An employer looks at unemployment.* Vital Speeches, Aug. 15, 1940.
ROBBINS, E. C. *War-time labor productivity.* Harvard Bus. Rev., Autumn, 1940. Pp. 7.
ROGERS, H. O. *Employment prospects in the petroleum and natural-gas industry.* Mo. Lab. Rev., June, 1940. Pp. 15.
ROHATGI, B. N. *Labour problems and labour legislation in India.* Indian Jour. Econ., Apr., 1940. Pp. 6.
RUDRA, S. K. *Some aspects of the Indian labour problem.* Indian Jour. Econ., Apr., 1940. Pp. 14.
SAKSENA, S. P. *Applicability of the principle of minimum living wage in India.* Indian Jour. Econ., Apr., 1940. Pp. 10.
SETH, B. R. *Minimum wage legislation.* Indian Jour. Econ., Apr., 1940. Pp. 9.
SIEGEL, I. H. *Hourly earnings and unit labor cost in manufacturing.* Jour. Am. Stat. Assoc., Sept., 1940. Pp. 6.
SINHA, A. R. *A preliminary study of the distribution of expenditures of working class families in Bombay and Madras cities.* Sankhyā, Indian Jour. Stat., Mar., 1940. Pp. 12.
SRIKANTAN, K. S. *Labour in ancient India.* Indian Jour. Econ., Apr., 1940. Pp. 6.
STERN, B. *Technology on trial.* Lab. Inf. Bull., June, 1940. Pp. 5.
SUFRIN, S. C. *The effects of minimum wages.* Am. Econ. Rev., Sept., 1940. Pp. 3.
WEINTRAUB, D. and MAGDOFF, H. *The service industries in relation to employment trends.* Econometrica, Oct., 1940. Pp. 23.
ZEICHNER, O. *The legal status of the agricultural laborer in the South.* Pol. Sci. Quart., Sept., 1940. Pp. 17.
ZISKIND, D. *Labor and the Sherman Antitrust act.* Lab. Inf. Bull., July, 1940. Pp. 3.
Annual wage and guaranteed-employment plans in union agreements. Mo. Lab. Rev., Aug., 1940. Pp. 7.
Canadian National Labor Supply Council. Mo. Lab. Rev., Aug., 1940. P. 1.
Changes in wage rates and earnings in 1939-1940. Econ. Jour., June-Sept., 1940. Pp. 6.
Expenditures of wage earners and clerical workers for house-furnishings and operation. Mo. Lab. Rev., June, 1940. Pp. 18.
Hours of work of municipal firemen in the United States. Mo. Lab. Rev., July, 1940. Pp. 14.
Indian labour in Ceylon, Fiji, and British Malaya. Internat. Lab. Rev., July, 1940. Pp. 20.
Pay of enlisted personnel in the United States army and navy. Mo. Lab. Rev., July, 1940.
The President's powers and the labour market. Economist (London), July 20, 1940.
Production, employment, and pay rolls first six months of 1940. Lab. Inf. Bull., Sept., 1940.
Share-the-work provisions in union agreements. Mo. Lab. Rev., June, 1940. Pp. 9.
Union agreements in aircraft manufacture. Mo. Lab. Rev., Aug., 1940. Pp. 13.
Wages, hours, and employment in the New York Metropolitan area, 1928-1940. Conf. Bd. Econ. Record, Aug. 6, 1940. Pp. 6.
Wages, hours, employment and payrolls in manufacturing industry. Conf. Bd. Econ. Record, Sept. 7, 1940. Pp. 5.
Wartime production and labor regulations in Italy. Mo. Lab. Rev., Aug., 1940. Pp. 3.

Money, Prices, Credit, and Banking

ADAMS, E. S. *Investment preparedness—ten practical suggestions.* Banking, Aug., 1940.
AIREY, C. R. *The scope of price regulation* (with comment by W. Prest). Econ. Record, June, 1940. Pp. 4.
"AKANTHOS." *The relation of banker and customer in peace and war.* Bankers' Insur. Manag. and Agents' Mag., Aug., 1940. Pp. 4.
ATWOOD, A. W. *Financial statesmanship—the banks and industrial mobilization.* Banking, Aug., 1940. Pp. 3.
BACKMAN, J. *Flexibility of cheese prices.* Jour. Pol. Econ., Aug., 1940. Pp. 4.
BALOGH, T. *The drift towards a rational foreign exchange policy.* Economica, Aug., 1940. Pp. 32.
————. *Foreign exchange and export trade policy.* Econ. Jour., Mar., 1940. Pp. 26.
BELL, K. C. *The bank's interest in borrowers' insurance.* Bankers Mag., Oct., 1940. Pp. 4.
BLOCH, K. *Far Eastern war inflation.* Pacific Affairs, Sept., 1940. Pp. 24.
————. *Inflation continues along similar lines in all parts of China.* Far East. Survey, July 3, 1940. Pp. 2.
BOSE, S. R. *Price control.* Indian Jour. Econ., Apr., 1940. Pp. 8.
BOWEN, I. and WORSWICK, G. D. N. *The controls and war finance.* Oxford Econ. Papers, Sept., 1940. Pp. 28.
BRAY, J. F. L. *Small savings.* Econ. Jour., June-Sept., 1940. Pp. 12.
BROWN, W. A., JR. *Gold—asset or liability?* Trusts and Estates, Aug., 1940. Pp. 6.
CASAZZA, A. J. *Savings banking in wartime—investment necessities today.* Trusts and Estates, Sept., 1940. Pp. 6.
CHAND, G. *The exchange stabilization funds: their function and future.* Indian Jour. Econ., Apr., 1940. Pp. 9.
CORNS, M. C. *Sound management or capital ratio?* Bankers Mag., July, 1940. Pp. 4.
CURRY, L. K. *Bank operations and the wage-hour problem.* Bankers Mag., Oct., 1940.
DE TOMA, A. *Sulla valutazione internazionale della lira.* Riv. Ital. di Sci. Econ., July, 1940. Pp. 14.
DRUCKER, P. F. *Can the gold problem be solved?* Harper's, July, 1940.
D'SOUZA, V. L. *Exchange equalisation.* Indian Jour. Econ., Apr., 1940. Pp. 11.
EINZIG, P. *Exchange control at last?* Banker (London), Aug., 1940.
EISNER, F. W. *United States freezing of foreign credits.* Bankers Mag., Oct., 1940. Pp. 4.
EMERSON, G. *The future of deposit insurance.* Bankers Mag., July, 1940. Pp. 4.
FERLINI, E. *Moneta, credito, banche e borse.* Riv. Internaz. di Sci. Soc., May, 1940. Pp. 19.
GAINSBRUGH, M. R. and OSBORNE, H. D. *Consumption, savings and defense financing.* Conf. Bd. Econ. Record Suppl., Sept. 5, 1940. Pp. 8.
GILLES, R. C. *International comparison of wholesale prices.* Rev. Econ. Stat., Aug., 1940.
GORDON, D. *Some current problems.* Canadian Banker, July, 1940. Pp. 12.
HANSEN, H. E. *The outlook for production costs.* Conf. Bd. Econ. Record, Sept. 7, 1940.
HARRIS, S. E. *American gold policy and allied war economics.* Econ. Jour., June-Sept., 1940.
————. *The official and unofficial markets for sterling.* Quart. Jour. Econ., Aug., 1940.
HOLDEN, G. *Exchange control in British war finance: a correction.* Quart. Jour. Econ., Aug., 1940. Pp. 2.
HORTON, D. C. *Regional trends of farm-mortgage interest rates, 1910-39.* Agric. Finan. Rev., May, 1940. Pp. 10.
HUBBARD, J. B. *Easy money: doctrine and results.* Harvard Bus. Rev., Autumn, 1940.
JACK, L. B. *The U.S. dollar problem.* Canadian Banker, Oct., 1940. Pp. 8.
JANES, C. V. *History of exchange control in Australia.* Econ. Record, June, 1940. Pp. 18.
JONES, J. H. *Financial economy and inflation.* Accountant (London), Aug. 3, 10, 1940.
JORDAN, H. J. *The activity of home financing agencies in New Mexico.* New Mexico Bus. Rev., July, 1940. Pp. 6.
KELLY, P. B. *Better bank investment management.* Bankers Mag., Aug., 1940. Pp. 6.
KEMMERER, E. W. *Our present gold problem.* Vital Speeches, June 1, 1940. Pp. 5.
KOMINOS, A. *Le contrôle de l'état sur le marché monétaire et le marché des capitaux.* Rev. des Sci. Econ. et Finan., Apr.-June, 1940. Pp. 23.

LINGARD, H. T. *Lender distribution of farm-mortgage recordings, 1910-39.* Agric. Fin. Rev., May, 1940. Pp. 8.
MADGE, C. *War-time saving and spending: a district survey.* Econ. Jour., June-Sept., 1940. Pp. 13.
MANUEL, R. W. *To preserve our free banking system.* Bankers Mag., Oct., 1940. Pp. 6.
MILLER, H. S. *Italian monetary and exchange policies under fascism.* Am. Econ. Rev., Sept., 1940. Pp. 7.
MILLER, S. L. *The banking invasion of the consumer credit field.* Annalist, Aug. 8, 1940.
MILLS, F. C. *The anatomy of prices, 1890-1940.* Nat. Bur. Econ. Res. Bull., Sept. 9, 1940. Pp. 12.
MORTON, W. A. *A zero deposit rate.* Am. Econ. Rev., Sept., 1940. Pp. 18.
NADLER, M. *The war and interest rate trends.* Bankers Mag., July, 1940. Pp. 2.
———. *War, wealth and inflation.* Trusts and Estates, Sept., 1940. Pp. 5.
NAYER, P. N. and PILLAI, P. S. B. *An analysis of sugar and gur prices in India in the post-protection period.* Sankhyā, Indian Jour. Stat., Mar., 1940. Pp. 6.
NUGENT, R. *Consumer credit in the west—a rapid expansion shown in the coast states.* Banking, July, 1940. Pp. 2
RADICE, E. A. *Consumption, savings, and war finance.* Oxford Econ. Papers, Sept., 1940. Pp. 14.
RAGAZZI, B. R. *La dinamica dei salari e del costo della vita nell'economia corporativa.* Riv. Ital. di Sci. Econ., July, 1940. Pp. 34.
RAO, B. R. S. *Recent developments in central bank technique.* Indian Jour. Econ., Apr., 1940. Pp. 12.
RAO, T. S. *Easy money policy.* Indian Jour. Econ., Apr., 1940. Pp. 9.
SCOTT, H. D. *Foreign exchange—control and free.* Canadian Banker, July, 1940. Pp. 7.
SHIELDS, M. *A measure of purchasing power inflation and deflation.* Jour. Am. Stat. Sept., 1940. Pp. 10.
SHIRRAS, G. F. *The position and prospects of gold.* Econ. Jour., June-Sept., 1940. Pp. 17.
SORRELL, V. G. *Problems of exchange between the United States and Mexico.* New Mexico Bus. Rev., July, 1940. Pp. 11.
STEWART, J. R. *Manchoukuo to get more foreign exchange from Japan.* Far East. Survey, July 3, 1940. Pp. 2.
SWAN, T. W. *Australian war finance and banking policy.* Econ. Record, June, 1940. Pp. 18.
TOKUNAGA, K. *Monetary and financial reorganization in North China.* Kyoto Univ. Econ. Rev., Apr., 1940. Pp. 30.
TURNER, A. V. *Strange money.* Canadian Banker, Oct., 1940. Pp. 7.
UGGÈ, A. *Prezzi, costo della vita, salari e occupazione operaia.* Riv. Internaz. di Sci. Soc., May, 1940. Pp. 22.
VINING, R. *A process analysis of bank credit expansion.* Quart. Jour. Econ., Aug., 1940. Pp. 25.
WIGGINS, A. L. M. *Problems in small business credit.* Bankers Mag., Sept., 1940. Pp. 3.
WOOLFSON, A. P. *M-Day and your bank.* Bankers Mag., Sept., 1940. Pp. 5.
The banking half-year. Bankers' Insur. Manag. and Agents' Mag., July, 1940. Pp. 7.
The currency function of the federal reserve banks. Fed. Res. Bull., July, 1940. Pp. 3.
Earnings and expenses of member banks. Fed. Res. Bull., July, 1940. Pp. 3.
French banking and currency. Bankers' Insur. Manag. and Agents' Mag., Aug., 1940. Pp. 5.
The geography of FHA mortgages. Banking, Aug., 1940. P. 1.
Gold reserves of central banks and governments. Fed. Res. Bull., Sept., 1940. Pp. 18.
The gold stock. Fed. Res. Bull., Sept., 1940. Pp. 2.
Gold's war diary—a chronology of recent events. Banking, Aug., 1940. Pp. 2.
The June bank statements. Bankers' Insur. Manag. and Agents' Mag., Aug., 1940. Pp. 8.
The money market and the war. Bankers' Insur. Manag. and Agents' Mag., Aug., 1940.
The progress of banking in Great Britain and Ireland during 1939. Bankers' Insur. Manag. and Agents' Mag., July, Aug., Sept., 1940. Pp. 11, 14, 19.
Wartime control of interest rates. Banker (London), Aug., 1940.

Public Finance, Taxation, and Tariff

ALVORD, E. C. *The excess profits tax—profits and possibilities.* Controller, Sept., 1940.
ATWOOD, A. W. *Billions for defense—the practical aspect of government borrowing.* Banking, July, 1940. Pp. 2.
BLAKEY, R. G. and BLAKEY, G. C. *Reorganization in Minnesota, 1939.* Bull. Nat. Tax Assoc., June, 1940. Pp. 2.
BLOCH, H.-S. *The evolution of French taxation—an historical sketch.* Bull. Nat. Tax Assoc., June, 1940. Pp. 8.
BRATTER, H. M. *Government financial agencies.* Banking, Sept., 1940. Pp. 14.
BROOKS, G. W. *The banker and local tax problems.* Bankers Mag., Sept., 1940. Pp. 4.
BURKHEAD, J. V. *Double taxation and jurisdiction to tax.* Bull. Nat. Tax Assoc., June, 1940. Pp. 8.
BYRD, H. F. *Debts, deficits and defense.* Trusts and Estates, Aug., 1940. Pp. 4.
CLAFLIN, A. *Tax economy—the taxpayer association movement.* Banking, Aug., 1940. P. 1.
COATES, A. *Tax for necessary expense takes no vote, but what is necessary?* Popular Govt., July-Aug., 1940. Pp. 2.
CONNELY, E. F. *Financing our preparedness program.* Bankers Mag., Aug., 1940. Pp. 4.
COOPER, W. A., et al. *A discussion of excess-profits taxes.* Jour. Accountancy, Sept., 1940. Pp. 16.
DALY, M. *Regional differences in rates and rateable values in England and Wales, 1921-1936.* Quart. Jour. Econ., Aug., 1940. Pp. 31.
DUE, J. F. *The incidence of sales taxes: ad valorem and specific taxes.* Quart. Jour. Econ., Aug., 1940. Pp. 7.
EDELBERG, V. *Flexibility of the yield of taxation—some econometric investigations* (with discussion). Jour Royal Stat. Soc., part ii, 1940. Pp. 38.
ELLIS, E. *Public opinion and the income tax, 1860-1900.* Miss. Valley Hist. Rev., Sept., 1940. Pp. 18.
FRANK, J. N. *Government financing of war—the demands on private income and consumption.* Trusts and Estates, Aug., 1940. Pp. 4.
FREEMAN, L. J. *The shape of taxes to come?* Barron's, July 8, 1940.
GILBERT, D. W. *The incidence of sales taxes: rejoinder.* Quart. Jour. Econ., Aug., 1940.
GREELEY, H. D. *Estate tax apportionment in New York.* Jour. Accountancy, Oct., 1940. Pp. 12.
GUTHMANN, H. F. *Excess profits taxation.* Annalist, Aug. 8, 1940.
HIGGINS, B. H. *The incidence of sales taxes: a note on methodology.* Quart. Jour. Econ., Aug., 1940. Pp. 8.
JASTRAM, R. W. *The incidence of sales taxes: the shifting of sales taxes.* Quart. Jour. Econ., Aug., 1940. Pp. 6.
LAWRENCE, F. W. P. *Keynes: a post-budget comment.* Fabian Quart., Summer, 1940. Pp. 7.
LEE, M. W. *Recent trends in chain-store tax legislation.* Jour. Bus. Univ. Chicago, pt. 1, July, 1940. Pp. 22.
MAKIN, F. B. *Some principles of taxation.* Bankers' Insur. Manag. and Agents' Mag., Sept., 1940. Pp. 5.
MARTIN, J. W. *Corporate taxes and the assessment of public utility operating property.* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 8.
————. *Effects of taxation on industrial and commercial development with special reference to the South.* Southwest Soc. Sci. Quart., Mar., 1940. Pp. 10.
————. *Practice before the Kentucky Department of Revenue.* 1. *Tax procedure.* 2. *Alcohol control procedure.* Kentucky Law Jour., Nov., 1939. Pp. 17.
————. *Tendencies in state and local taxation.* Taxes—The Tax Mag., Feb., 1940. Pp. 5.
METZ, S. S. *Some problems of German war finance.* Bankers' Insur. Manag. and Agents' Mag., Sept., 1940. Pp. 8.
MITCHELL, W. S. *General tax limited to 15¢, but what about special purposes?* Popular Govt., July-Aug., 1940. Pp. 3.
OAKES, E. *The federal offset and the American death tax system.* Quart. Jour. Econ., Aug., 1940. Pp. 33.

PAISH, F. W. *British floating debt policy.* Economica, Aug., 1940. Pp. 23.
PARKINSON, J. F. *Some problems of war finance in Canada.* Canadian Jour. Econ. and Pol. Sci., Aug., 1940. Pp. 21.
PATTERSON, E. M. *War financing—the functions of taxation and borrowing.* Trusts and Estates, Aug., 1940. Pp. 5.
SHIOMI, S. *The reform of the tax system.* Kyoto Univ. Econ Rev., Apr., 1940. Pp. 37.
THAYER, J. M., Jr. *National defense appropriations in the federal total.* Conf. Bd. Econ. Record, Aug. 22, 1940. P. 1.
TIRUMALCHAR, B. *Deficit financing.* Indian Jour. Econ., Apr., 1940. Pp. 20.
TOUSAW, A. A. *Taxation problems of life insurance.* Canadian Jour. Econ. and Pol. Sci., Aug., 1940. Pp. 8.
TRAYLOR, O. F. *Gasoline tax refunds for farm tractors and stationary engines.* Bull. Nat. Tax Assoc., June, 1940. Pp. 3.
TREMAINE, M. S. *A positive check on public expenditures.* Bankers Mag., Oct., 1940. Pp. 3.
The budget of 1940. Bull. Canterbury Chamber of Comm., Aug., 1940. Pp. 4.
Defense expenditures and taxation. Mo. Bank Letter, Nat. City Bank, N.Y., Aug., 1940.
Excess profits taxation. Tax Foundation, Aug. 15, 1940. Pp. 25.
Federal individual and corporation income tax rates, 1909 to 1940. Conf. Bd. Econ. Record, Sept. 21, 1940. Pp. 2.
Financing the war—the coming budget. Bankers' Insur. Manag. and Agents' Mag., Aug., 1940. Pp. 8.
General taxation in Cuba. Compar. Law Ser., Dept. of Comm., June, 1940. Pp. 8.
The revised budget—income tax again raised. Bankers' Insur. Manag. and Agents' Mag., Sept., 1940. Pp. 8.
State distribution of defense contracts. Conf. Bd. Econ. Record, Sept. 21, 1940. P. 1.

Population and Migration

BLOCH, K. and HANWELL, N. D. *Unprecedented Japanese influx to China checked.* Far East. Survey, Aug. 14, 1940. Pp. 2.
BOLDRINI, M. *Popolazione.* Riv. Internaz. di Sci. Soc., May, 1940. Pp. 18.
DENNISON, S. R. *The distribution of the industrial population.* Econ. Jour., June-Sept., 1940. Pp. 6.
HALLIDAY, I. G. *Natal and indentured Indian immigration.* So. African Jour. Econ., Mar., 1940. Pp. 9.
HANSEN, A. H. *Extensive expansion and population growth.* Jour. Pol. Econ., Aug., 1940.
HINDEN, R. *The fertility and mortality of the population of Palestine.* Sociological Rev., Jan.-Apr., 1940. Pp. 21.
RHODES, E. C. *Population mathematics.* II. Jour. Royal Stat. Soc., pt. ii, 1940. Pp. 28.
SANFORD, G. A. *Selective migration in a rural Alabama community.* Am. Sociological Rev., Oct., 1940. Pp. 8.
TAEUBER, C. and TAEUBER I. B. *German fertility trends, 1933-39.* Am. Jour. Soc., Sept., 1940. Pp. 18.
VANDERHYDE, C. J. *Population growth, 1930-40: a basic factor affecting public utility earnings.* Annalist, Sept. 12, 1940.
WILSON, L. S. *Some notes on the growth of population in Minnesota.* Geograph. Rev., Oct., 1940. Pp. 5.
Four hundred thousand widows each year. Metropolitan Life Insur. Stat. Bull., Aug., 1940.
Growth of American cities in the last decade. Metropolitan Life Insur. Stat. Bull., Sept., 1940. Pp. 5.

Social Problems and Reforms

BUTLIN, S. J. *The political economy of war.* Econ. Record, June, 1940. Pp. 13.
CROSS, W. L. *Underlying issues of the campaign—political preface.* Yale Rev., Autumn, 1940. Pp. 6.

ELSAS, M. J. *War and housing.* Econ. Jour., Mar., 1940. Pp. 9.
FARLEY, M. S. *Japan experiments with rationing.* Far East. Survey, Aug. 14, 1940. Pp. 2.
FEILER, A. *The worship of bigness: are the small nations doomed?* Soc. Research, Sept., 1940. Pp. 11.
GEORGE, E. B. *The defense program remodels the economic system.* Dun's Rev., Oct., 1940. Pp. 18.
GRATTAN, C. H. *Living standards for tomorrow.* Harper's, Aug., 1940.
GREEN, H. W. *Origin and development of a continuous real property inventory.* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 10.
HEILPERIN, M. A. *Notes on economic foundations of peace.* World Affairs Interpreter, Summer, 1940. Pp. 8.
HOYT, H. *Urban decentralization.* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 7.
JOHNSON, A. *Underlying issues of the campaign—economic questions.* Yale Rev., Autumn, 1940. Pp. 9.
KOCCALIS, A. *L'aspect économique de la guerre.* Rev. des Sci. Econ. et Finan., Apr.-June, 1940. Pp. 20.
MARSCHAK, J. *Peace economics.* Soc. Research, Sept., 1940. Pp. 19.
MOLEY, R. *A look at our economic future.* Bankers Mag., Aug., 1940. Pp. 5.
MUNRO, W. B. *Some economic repercussions of medical progress.* Scientific Mo., Aug., 1940. Pp. 7.
OGRURN, W. F. and COOMBS, L. C. *American government and politics: the economic factor in the Roosevelt elections.* Am. Pol. Sci. Rev., Aug., 1940. Pp. 9.
PLATT, R. R. *Economic and social problems in the British West Indies: a review.* Geograph. Rev., Oct., 1940. Pp. 4.
POPPER, D. H. *The French war economy.* Conf. Bd. Econ. Record, July 24, 1940. Pp. 11.
SCHOENFELD, M. H. *Progress of public housing in the United States.* Mo. Lab. Rev., Aug., 1940. Pp. 16.
SLICHTER, S. H. *The economic problems of armament expansion.* Bull. Harvard Bus. School Alumni Assoc., July, 1940. Pp. 2.
STAFFORD, J. *Planning for war.* Econ. Jour., Mar., 1940. Pp. 15.
STAUDINGER, H. and LEHMANN, F. *Germany's economic mobilization for war.* Conf. Bd. Econ. Record, July 24, 1940. Pp. 20.
WALKER, E. R. *War economy: the nature of the problem.* Econ. Record, June, 1940. Pp. 15.
WALKER, E. R. and RILEY, M. E. *Australia's war economy: developments from December, 1939, to May, 1940.* Econ. Record, June, 1940. Pp. 4.
WOOD, G. L. *The economic implications of peace for Australia.* Econ. Record, June, 1940. Pp. 14.
Federal housing of war industry workers, 1917-18. Mo. Lab. Rev., July, 1940. Pp. 8.
When war ends. Annals Am. Acad. Pol. and Soc. Sci., July, 1940. Pp. 144.

Insurance and Pensions

BAKER, H. C. *Business interruption insurance.* Jour. Accountancy, Aug., 1940. Pp. 9.
CAMPBELL, J. A. *Mortality tables in life insurance management.* Canadian Jour. Econ. and Pol. Sci., Aug., 1940. Pp. 16.
CURTIS, W. R. *Unemployment compensation experience in the South.* So. Econ. Jour., July, 1940. Pp. 12.
DRACHMANN, G. M. *Reciprocity of social insurance and assistance among the northern European countries.* Internat. Lab. Rev., July, 1940. Pp. 11.
HAENSEL, P. *A social security tax?—or insurance?* Taxes—The Tax Mag., June, 1940.
HAZARD, W. H. *The literature of life insurance.* Harvard Bus. Rev., Autumn, 1940. Pp .10.
PARRY, C. L. *European insurance companies and real estate, with particular reference to housing.* Jour. Land and Pub. Util. Econ., Aug., 1940. Pp. 12.
Field assistance to retirement annuity applicants. Mo. Rev. Rail. Retire. Bd., Aug., 1940.
Savings bank life insurance. Lab. Inf. Bull., June, 1940. Pp. 2.
Unemployment insurance. Canadian Banker, Oct., 1940. Pp. 6.

Socialism and Coöperative Enterprises

BARNETT, R. W. *Chinese industrial coöperatives consolidate gains.* Far East. Survey, July 3, 1940. Pp. 2.

POULIN, G. *Le mouvement coopératif au Canada.* Culture, June, 1940. Pp. 20.

WOOTTON, B. and PRITT, D. N. *Socialism and federation.* Fabian Quart., Summer, 1940.

Statistics and Its Methods

ADARKAR, B. P. *The problem of the ratio: a summary.* Sankhyā, Indian Jour. Stat., Mar., 1940. Pp. 6.

BAUMGART, G. *Weekly index numbers—measuring business activity.* Jour Bus. Univ. Chicago, pt. 1, July, 1940. Pp. 19.

BOWLEY, A. L. and KEYNES, J. M. *The measurement of real income.* Econ. Jour., June-Sept., 1940. Pp. 4.

CAIZZI, B. *De la valeur théorique de deux concepts statistiques: le pouvoir d'achat de la monnaie et l'indice des prix.* Zeitschr. f. Schweiz. Stat. und Volkswirtschaft, 76 Jhrg., 1 Heft, 1940. Pp. 10.

FRANKEL, S. H. and NEUMARK, S. D. *Note on the national income of the Union of South Africa, 1927-28, 1932-33, 1934-35.* So. African Jour. Econ., Mar., 1940. Pp. 4.

GHOSH, T. *Sampling in family budget enquiries.* Sankhyā, Indian Jour. Stat., Mar., 1940.

GILBOY, E. W. *Income-expenditure relations.* Rev. Econ. Stat., Aug., 1940. Pp. 7.

HARPER, F. A. *Analyzing data for relationships.* Mem. Cornell Univ. Agric. Exper. Sta., June, 1940. Pp. 13.

KEYNES, J. M. *The concept of national income: a supplementary note.* Econ. Jour., Mar., 1940. Pp. 6.

KNUDSEN, L. F. *Interdependence in a series.* Jour. Am. Stat. Assoc., Sept. 1940. Pp. 8.

MADOW, W. G. *Note on tests of departure from normality.* Jour. Am. Stat. Assoc., Sept., 1940. Pp. 3.

MENDERSHAUSEN, H. *Differences in family savings between cities of different size and location, white and negroes.* Rev. Econ. Stat., Aug., 1940. Pp. 14.

METZLER, L. A. *The assumptions implied in least squares demand techniques.* Rev. Econ. Stat., Aug., 1940. Pp. 12.

MOREHOUSE, F. W. *The Wisconsin committee on statistics.* Jour. Am. Stat. Assoc., Sept., 1940. Pp. 5.

THOMAS, P. J. *A statistical analysis of the shift of expenditure in a prohibition area.* Sankhyā, Indian Jour. Stat., Mar., 1940. Pp. 12.

TINBERGEN, J. *On a method of statistical research: a reply* (with a comment by J. M. Keynes). Econ. Jour., Mar., 1940. Pp. 16.

TOUT, H. *A statistical note on family allowances.* Econ. Jour., Mar., 1940. Pp. 9.

WILLIAMS, F. M. *Factors to be considered in measuring intercity and interregional differences in living costs.* Jour. Am. Stat. Assoc., Sept., 1940. Pp. 11.

WOODBURY, R. M. *Quantity adjustment factors in cost-of-living ratios.* Econometrica, Oct., 1940. Pp. 11.

State and regional differences in income payments, 1929 to 1938. Mo. Lab. Rev., June, 1940. Pp. 7.

NOTES

The term of service of Davis R. Dewey as managing editor of this REVIEW terminates at the end of the present year. Professor Paul T. Homan of Cornell University has been chosen by the Executive Committee to be the new managing editor, his duties to begin January 1, 1941.

The fifty-third annual meeting of the AMERICAN ECONOMIC ASSOCIATION will be held with the Southern Economic Association in New Orleans, Louisiana, December 27-30, with headquarters at the Roosevelt Hotel. The preliminary program has been arranged as follows:

Friday, December 27

9:00 A.M. MEETING OF THE EXECUTIVE COMMITTEE, Southern Economic Association.

10:00 A.M. 1. Gold and the Monetary System (joint session with the Econometric Society)—chairman, O. M. W. Sprague, Harvard University
Papers: Hans P. Neisser, University of Pennsylvania; Charles O. Hardy, Brookings Institution
Discussion: Fritz Machlup, University of Buffalo; William Adams Brown, Jr., Brown University

10:00 A.M. 2. ROUND TABLE CONFERENCE: ECONOMIC RESEARCH I—chairman, Paul T. Homan, Cornell University
Papers: Carl F. Remer, University of Michigan, "The Rôle of the Universities"; Harold G. Moulton, Brookings Institution, "The Rôle of Research Institutions"; Edward S. Mason, Harvard University, "The Rôle of Conferences and Other Coöperative Groups"; John H. Cover, United States Bureau of Foreign and Domestic Commerce, "The Rôle of Private Business"; Morris A. Copeland, Central Statistical Board, "The Rôle of Government"

12:00 M. MEETING OF THE EXECUTIVE COMMITTEE, American Economic Association

2:30 P.M. 1. Causal Factors in Economic Regionalism—chairman, Esmond Phelps, Tulane University
Papers: Joseph J. Spengler, Duke University, "Factors in Regional Differentiation"; Melvin G. de Chazeau, University of Virginia, "The Power Industry as a Regional Problem"
Discussion: Robert W. Elsasser, Tulane University; Truman C. Bigham, University of Florida

2:30 P.M. 2. ROUND TABLE CONFERENCE: ECONOMIC RESEARCH II—chairman, Paul T. Homan, Cornell University
Papers: Edwin G. Nourse, Brookings Institution, "The Rôle of the Social Science Research Council"; Joseph H. Willits, Rockefeller Foundation, "The Rôle of the Foundations"
Summary: J. Frederic Dewhurst, Twentieth Century Fund; discussion.

4:30 P.M. BUSINESS MEETING, Southern Economic Association

6:00 P.M. TESTIMONIAL DINNER TO DAVIS R. DEWEY

8:30 P.M. PRESIDENTIAL ADDRESSES: Frederick C. Mills, American Economic Association; John B. Woosley, Southern Economic Association

Saturday, December 28

8:45 A.M. BUSINESS MEETING, American Economic Association

9:30 A.M. 1. The Federal Budget: Economic Consequences of Deficit Financing—chairman, A. B. Wolfe, Ohio State University

Papers: John H. Williams, Harvard University; Bernard F. Haley, Stanford University

Discussion: Dan T. Smith, Harvard University; Lawrence H. Seltzer, Wayne University

9:30 A.M. 2. ROUND TABLE CONFERENCE: PROBLEMS IN THE TEACHING OF ECONOMICS—chairman, Ralph H. Blodgett, University of Illinois

Papers: Clifford L. James, Ohio State University, "The Objectives of the First Course in the Principles of Economics"; Leland J. Gordon, Denison University, "Consumer Economics as the First Course in Economics"; Kenneth M. Spang, Yale University, "Planning Integrated Courses of Study for the Major in Economics"

Discussion: George J. Stigler, University of Minnesota; H. L. McCracken, Louisiana State University

2:00 P.M. 1. The Agricultural Situation: A Review of Fundamental Factors, an Evaluation of Public Measures, and an Appraisal of Prospects (joint session with the American Farm Economic Association)—chairman, W. I. Myers, Cornell University

Papers: Howard R. Tolley, United States Department of Agriculture; T. W. Schultz, Iowa State College

Discussion: Benjamin H. Hibbard, University of Wisconsin; John D. Black, Harvard University

2:00 P.M. 2. The Status and Rôle of Private Investment in the American Economy, 1940—chairman, Harold G. Moulton, Brookings Institution

Papers: Theodore J. Kreps, Stanford University; Richard M. Bissell, Jr., Yale University

Discussion: Oscar L. Altman, National Resources Planning Board: Imre de Vegh, Scudder, Stevens and Clark

4:00 P.M. Tea and Non-professional Discourse

Sunday, December 29

8:00 P.M. The Economics of Alfred Marshall: A Semicentennial Review (joint session with the Economic Society)—chairman Wesley C. Mitchell, Columbia University

Papers: Jacob Viner, University of Chicago; Joseph A. Schumpeter, Harvard University

Discussion: Frederic B. Garver, University of Minnesota; William Jaffé, Northwestern University

10:00 P.M. SMOKER

Monday, December 30

8:45 A.M. BUSINESS MEETING, American Economic Association

9:30 A.M. 1. Unemployment in the United States, 1930-50—chairman, J. Douglas Brown, Princeton University

Papers: Paul Webbink, Social Science Research Council; Oskar Morgenstern, Princeton University

Discussion: Isador Lubin, United States Bureau of Labor Statistics; E. Wight Bakke, Yale University

9:30 A.M. 2. Economic Consequences of War since 1790 (joint session with the Economic History Association)—chairman, Earl J. Hamilton, Duke University

Papers: Anne Bezanson, University of Pennsylvania "War and Technology"; Henry M. Oliver, Yale University, "War and Inflation"; Willard L. Thorp, Associated Gas and Electric Corporation, "Post-war Depressions"

Discussion: Wesley C. Mitchell, Columbia University; E. A. J. Johnson, New York University

12:15 P.M. LUNCHEON MEETING: Some Economic Problems of War, Defense, and Post-war Reconstruction—chairman, Joseph H. Willits, Rockefeller Foundation

Papers: Alvin H. Hansen, Harvard University; Theodore O. Yntema, University of Chicago; A. Loveday, League of Nations

3:00 P.M. 1. The United States in the World Economy, 1940: International Economic Relations and Problems of Commercial Policy

Papers: P. T. Ellsworth, University of Cincinnati; Leo Pasvolsky, United States Department of State

Discussion: Otto Nathan, New York University; Ernest M. Patterson, University of Pennsylvania

3:00 P.M. 2. Price Policy and Price Behavior

Papers: James C. Bonbright, Columbia University, "Criteria for Policy Decisions in Price and Rate Making"; Walter F. Crowder, United States Bureau of Foreign and Domestic Commerce (paper prepared jointly with Willard L. Thorp), "Some Factors in Industrial Price Policy and Price Behavior"

Discussion: Donald H. Wallace, Williams College; George J. Stigler, University of Minnesota

Arrangements for social activities at the New Orleans meeting of the American Economic Association are in charge of a special Hospitality Committee. The present membership of this Committee includes: Mrs. Elizabeth B. Schumpeter, chairman, Mrs. Herbert von Beckerath, Mrs. Clarence E. Bonnett, Mrs. Leslie J. Buchan, Mrs. Robert W. Elsasser, Mrs. Donald M. Halley, Mrs. Rufus C. Harris, Mrs. C. Reinold Noyes, Mrs. Esmond Phelps, Mrs. James B. Trant, Mrs. Jay Van Kirk, Mrs. C. Ashley Wright. The Hospitality Committee will sponsor a reception and tea for the entertainment of members of the American Economic and Southern Economic Associations and their wives, on the afternoon of Saturday, December 29.

The following names have been added to the membership of the AMERICAN ECONOMIC ASSOCIATION since August 1:

Atkins, D., Coastways Ranch, Pescadero, San Mateo County, Calif.
Brown, L. C., Regis College, Denver, Colo.
Cadman, P. F., 22 E. 40th St., New York City.
Chapman, B. B., State College, Fairmont, W.Va.
Colberg, M. R., 1306 21st St. N.W., Washington, D.C.
Criswell, B. N., 155 S. Bull St., Columbia, S.C.
Croteau, J. T., Saint Dunstan's College, Charlottetown, Prince Edward Island, Canada.
Curtiss, E. A., Wellesley College, Dept. of Econ., Wellesley, Mass.
Dahlberg, A. O., 725 Riverside Dr., New York City.
Fitzgerald, M. J., University of Notre Dame, Notre Dame, Ind.
Glidden, R. T., 57 Parker St., Watertown, Mass.
Grove, E. W., Bur. of Agric. Econ., U. S. Dept. of Agric., Washington, D.C.
Hall, F. P., Franklin College, Franklin, Ind.
Hauge, G. S., 104 Jefferson Rd., Princeton, N.J.

Herz, H., 1119 Wells Ave., Reno, Nev.
Hinshaw, R. W., Princeton University Graduate College, Princeton, N.J.
Jimenez-Macias, R., Avenida Sur 75, Caracas, Venezuela, S.A.
Kelly, M. A., Princeton University, Dept. of Econ., Princeton, N.J.
Loft, J., University of Chicago, Chicago, Ill.
Lundy, J. E., Princeton University, Dept. of Econ., Princeton, N.J.
Martin, B. F., School of Bus. Admin., Emory University, Ga.
Maurer, W. J., c/o Sunnen Products Co., 1841 Broadway, New York City.
Papi, G. U., Via Plinio 7, Rome, Itay.
Pearson, O. P., Automobile Manufacturers Assoc., New Center Bldg., Detroit, Mich.
Polyzoides, A. T., University of Southern California, School of Journalism, Los Angeles, Calif.
Rautenstrauch, W., Columbia University, New York City.
Reed, E. W., 203 E. Franklin St., Du Quoin, Ill.
Remington, W. W., 81 Horatio St., Apt. 1 R, New York City.
Reynolds, Mrs. R. A., 627 Regester Ave., Baltimore, Md.
Rosen, J., 7 Schützenmattstr., Basle, Switzerland.
Smith, R. L., 544 Hoye Ave., Akron, Ohio.
Staudt, Mrs. E. W., 3113 9th St. N., Arlington, Va.
Tassinari, G., via Lambro 2A, Rome, Italy.
Tierney, J. L., 1435 Sheridan St. N.W., Washington, D.C.
Trump, R. M., Tulane University, New Orleans, La.
Vickery, C. W., State Highway Dept., 304 E. Fifth St., Austin, Tex.
Watts, F. G., 217 W. Midland, Shawnee, Okla.
Whitman, W. T., The Citadel, Charleston, S.C.
Willett, H., 616 Investment Bldg., Washington, D.C.

The Social Science Research Council offers fellowships and grants-in-aid of research in the social sciences for the academic year 1941-42. For information apply to the Council, 230 Park Avenue, New York City.

The Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency are coöperating in the preparation of a comprehensive revision and compilation of banking statistics for the United States. The National Bureau of Economic Research, represented by Professor James W. Angell, is collaborating in the work. George W. Blattner of the staff of the Board of Governors has supervision of the project. The Board would be glad to receive any information concerning studies that are being made or have been made regarding banking trends in particular areas or regarding particular types of banks, whether made by individuals, statistical agencies, or banking authorities. It would also like to have any information, however fragmentary, concerning data of the types indicated which are not already accessible in the published reports of federal and state banking authorities. Information on non-national banks before 1914 will be especially welcome.

The Institute of Economics and Finance of Occidental College, Los Angeles, held its third session October 17-19, 1940. Among the subjects discussed were the international economy, the American economy, full production and economic fluctuations. Among the participants in the discussion were Frank D. Graham, Princeton University, Ira B. Cross, University of California, Robert B. Pettengill, University of Southern California, Arthur G. Coons, Claremont Colleges, Amos E. Taylor, United States Bureau of Foreign and Domestic Commerce, J. B. Condliffe, University of California, Carl Snyder, George W. Dowrie, Stanford University, Isador Lubin, United States Bureau of Labor Statistics, M. K. Bennett, Food Research Institute, Stanford University, Lewis A. Maverick, University of California at Los Angeles, Raymond McKelvey, Occidental

College, Ray E. Untereiner, California Institute of Technology, Oliver P. Wheeler, Federal Reserve Bank of San Francisco, Dudley F. Pegrum, University of California at Los Angeles.

The Tax Foundation, Inc., of New York City has granted two fellowships of $750 each to the department of economics, School of Commerce, Accounts and Finance, New York University, to encourage graduate study and productive work in the field of public finance, particularly in the economics of taxation. The first of these fellowships has been awarded to Mr. Grover W. Ensley of the University of Washington.

The National Income Division of the federal Department of Commerce has organized a new unit to continue the studies of capital formation and consumption begun by the National Bureau of Economic Research. William H. Shaw of the National Bureau is spending part of his time in supervising the new study.

The Mississippi Valley Historical Association announces that the index for volumes 16-25 of its *Review* is ready for delivery at a price of $5.00. Orders should be addressed to the Secretary of the Mississippi Valley Historical Association, Mrs. C. S. Pain, Lincoln, Nebraska.

The *Proceedings of the Eighteenth Annual Conference of the Pacific Coast Economic Association at the State College of Washington, Pullman, Washington, and the University of Idaho, Moscow, Idaho, December, 1939,* have been printed. For the subjects discussed, see the AMERICAN ECONOMIC REVIEW, March 1940, page 236.

W. Rupert Maclaurin and Charles A. Myers of the department of economics, Massachusetts Institute of Technology, are engaged in a study of a diversified industrial labor market with particular reference to the nature and extent of the movement of workers from one firm to another and the effect of this movement on wages. Individual earnings and personnel records for approximately 16,000 employees in 37 companies furnish the basis for the study, supplemented by interviews with a selected sample of workers. This is one part of a larger study of the factors influencing the movement of wages in various industries and communities in the United States. It is expected that some preliminary results will be published in the middle of 1941.

Frank William Taussig, professor emeritus at Harvard University, died November 11, 1940.

Robert Emmet Chaddock, professor of statistics at Columbia University, died October 21, 1940.

Appointments and Resignations

Lewis W. Adams of the statistical department of Holsapple and Company, New York City, is assistant professor of economics at Washington and Lee University.

J. R. Andrus, on leave from his post at the University of Rangoon, Burma, is visiting professor of economics at the University of Redlands.

Karl E. Ashburn, chairman of the department of economics and business administration at Southwestern Louisiana Institute, has been awarded a research grant by his institution to complete a study of the Louisiana Workmen's Compensation Insurance act and its administration.

Roy Ashmen of Northwestern University is instructor in statistics and marketing at the University of Detroit.

Harold B. Baker of Northwestern University is assistant professor of economics at Butler University.

Warren J. Baker has resigned as instructor in economics at the University of Alabama.

Wesley C. Ballaine is instructor in the department of economics at the University of Illinois.

Anthony Basch, formerly economic adviser to the National Bank of Czechoslovakia, has been appointed lecturer in economics at Brown University.

B. P. Beckwith has resigned as associate professor of economics at the University of Georgia.

E. M. Bernstein has been granted a year's leave of absence from the University of North Carolina to serve as economist with the Treasury Department.

John S. Bickley is instructor in economics at the University of Alabama.

George E. Bigge has been promoted to the rank of professor of economics at Brown University, and has an extended leave of absence to serve as a member of the Social Security Board.

V. W. Bladen has been promoted from associate professor to professor in the department of political economy at the University of Toronto.

Harry D. Bonham, associate professor of economics, has returned to the University of Alabama after a year's leave of absence.

Karl R. Bopp, who held a Guggenheim fellowship last year, has returned to his duties at the University of Missouri.

Robert P. Brecht has been promoted to the rank of associate professor of industry at the Wharton School, University of Pennsylvania.

M. G. Bridenstine has been promoted from associate professor to professor of economics at Butler University.

Royal Jay Briggs has resigned the chairmanship of the social science division at Kemper Military School to act as director of the Assessment Ratio Survey, a supplementary analysis to the whole reassessment program in Kansas City and Jackson County, Missouri.

George T. Brown has been promoted to the rank of assistant professor of economics at the Catholic University of America.

Samuel L. H. Burk is instructor in industry at the Wharton School, University of Pennsylvania.

F. A. Bushee has retired as professor and head of the economics department at the University of Colorado.

William F. Butler is instructor in commerce at the University of Virginia.

Horace C. Buxton, Jr., research assistant at the Harvard University Graduate School of Business, is instructor in the department of economics at Massachusetts Institute of Technology.

A. S. Campbell has resigned as associate professor at the University of Florida to take a position with the Tennessee Valley Authority.

James L. Campbell is instructor in economics at the School of Business Administration, Emory University.

Reynold E. Carlson of Harvard University is instructor in political economy at Johns Hopkins University.

Melvin G. de Chazeau, associate professor of commerce at the University of Virginia, is serving as economic adviser to the Advisory Commission of the Raw Materials Division of the Council of National Defense.

John Maurice Clark of Columbia University is serving as consultant in the Price Stabilization Division of the Council of National Defense.

Lawrence A. Cusack, associate professor of economics at Creighton University, Omaha, has completed his third summer of work on procedure and analysis in the office of the treasurer of the Federal Land Bank of Omaha.

Kenneth Dameron has returned to his position as associate professor in the department of business organization at Ohio State University.

Pearce Davis, instructor and tutor in the department of economics at Harvard University, is giving a course in modern economic theory at Clark University during the first semester of 1940-41.

James A. Dawson is instructor in economics at the Wharton School, University of Pennsylvania.

Burnham N. Dell of Princeton University has a leave of absence for the academic year 1940-41.

J. W. Dietz is part-time instructor in finance at the University of Florida.

George Dimmler is instructor in economics at the Wharton School, University of Pennsylvania.

C. H. Donovan of the University of North Carolina has accepted an assistant professorship of economics and public finance at the University of Florida.

Francis S. Doody is assistant in the department of economics, Massachusetts Institute of Technology.

Joseph Dorfman has been promoted from lecturer to assistant professor of political science at Columbia University.

Frank Edward Dykema has been advanced from instructor in commerce to assistant professor of economic history at the University of Alabama.

James S. Earley, assistant professor of economics at the University of Wisconsin, is on leave of absence for the first semester to do research for the Advisory Commission of the National Council of Defense on British War Finance Policies.

C. W. Efroymson has been promoted from assistant professor to associate professor of economics at Butler University.

Harvey Egherman of the University of Cincinnati is instructor in economics at Cornell University.

Irving Don Elberson is acting instructor of economics at Stanford University.

N. H. Engle has resigned from the position of assistant director of the Bureau of Foreign and Domestic Commerce to become adviser of distribution with the National Defense Council.

H. H. Erdman has resigned as assistant professor of agricultural economics at the University of Wisconsin to continue his work as a milk marketing specialist in the Chicago area with the federal Department of Agriculture.

G. Heberton Evans, Jr., who was on leave of absence last year, has returned to Johns Hopkins University.

Robert H. Ferguson of Brown University is instructor in economics at Cornell University.

Frank Whitson Fetter, professor of economics at Haverford College, spent the summer in Quito, Ecuador, as adviser to the Central Bank of Ecuador. He is to be on sabbatical leave from Haverford in the second semester of the current academic year.

E. R. Fischer is instructor in accounting and business administration at Louisiana State University.

M. E. Fischer is assistant in the department of economics, University of Illinois.

Irving Fisher will deliver an eight weeks' course of lectures on income tax reform during the first half of the second semester in the graduate division of economics of the University of Southern California.

Paul J. Fitzpatrick has been advanced to an associate professorship of economics at the Catholic University.

V. C. Fowke of the University of Saskatchewan is on leave of absence for 1940-41 as lecturer in the department of political economy at the University of Toronto.

Milton Friedman, on leave from the National Bureau of Economic Research, is a lecturer in economics at the University of Wisconsin and is supervising the Wisconsin Income Study.

John S. Gambs resigned as assistant United States labor commissioner in Geneva, Switzerland, to accept a position as associate professor of public welfare in the department of public welfare administration, Louisiana State University.

Morris E. Garnsey is on leave of absence from the University of Colorado to serve as economic adviser in the consumer division of the National Defense Advisory Council at Washington.

Max Gideonse has been promoted to the rank of associate professor of economics at Rutgers University.

Carter Goodrich, who has been serving as United States labor commissioner at Geneva, on leave from Columbia University, has returned to his post and is chairman of the governing body of the International Labour Office.

Robert H. Gray, assistant professor of economics and commerce at Washington and Lee University, is on leave of absence.

Julius Grodinsky has been promoted to associate professor of finance at the Wharton School, University of Pennsylvania.

Francis J. Haas, dean of the School of Social Science, Catholic University of America, has returned to this country after investigating wage and hour conditions in Puerto Rico for the United States government.

William Haber, professor of economics at the University of Michigan, has been granted an extension of his leave of absence for the first semester to enable him to continue his work as executive director of the National Refugee Service.

Robert Murray Haig has been appointed the new executive officer of the department of economics at Columbia University.

Herbert Hamilton, formerly assistant professor of business administration at Southeastern Louisiana College, has accepted a similar position at Southwestern Louisiana Institute.

John N. Hart is instructor in economics at Ohio State University.

A. W. Hendrickson is instructor in industry at the Wharton School, University of Pennsylvania.

Rexford B. Hersey has returned to the Wharton School, University of Pennsylvania, after a two-year leave of absence during which he served as chief of the editorial section of the International Labour Office in Geneva.

Benjamin Higgins of Harvard University assisted during the summer in conducting studies of current monetary and banking problems for the Federal Reserve Bank of New York.

George Hildebrand, Jr., is lecturer in economics at Wellesley College.

Claude E. Hobbs, Jr., of the University of North Carolina is instructor in economics and commerce at Washington and Lee University.

Alton R. Hodgkins is on sabbatic leave from Randolph-Macon Woman's College.

John A. Hogan of the University of Denever is lecturer in the department of economics and sociology at Tufts College.

William S. Hopkins has returned to Stanford University after spending the past year as senior staff member with the Committee on Social Security, Social Science Research Council, Washington.

H. D. Hotchkiss has been appointed assistant professor of business administration at The Citadel.

R. S. Howey, associate professor of economics at the University of Kansas, has resumed his duties after a year's leave of absence.

Robert J. Huffcut from the State Department at Washington is instructor in economics at Cornell University.

Thor Hultgren has joined the business cycles unit at the National Bureau of Economic Research.

M. H. Hunter, head of the department of economics, University of Illinois, received the honorary degree of doctor of laws from Muskingum College in June, 1940.

Vernon Jensen has been promoted from instructor to assistant professor of economics at the University of Colorado.

Keith W. Johnson is instructor in economics at Franklin and Marshall College.

Hiram L. Jome of DePauw University was acting professor of economics at the University of Missouri during the past summer session.

E. Gordon Keith has been promoted to assistant professor of finance at the Wharton School, University of Pennsylvania.

Arthur Kemp of Northwestern University is assistant in the department of economics, School of Commerce, Accounts, and Finance, New York University.

H. R. Kemp, professor in the department of political economy at the University of Toronto is on leave of absence with the War Time Prices and Trade Board in Ottawa.

J. W. Kendrick of the University of Chicago is taking the place of Assistant Professor R. T. Segrest at the University of Georgia.

M. Thomas Kennedy is instructor in economics at the Wharton School, University of Pennsylvania.

Willys Knight is assistant in the department of economics, University of Illinois.

Tjalling Koopmans of the School of Economic in Rotterdam is special lecturer in the department of economics, School of Commerce, Accounts, and Finance, New York University.

Maurice G. Levy-Hawes is instructor in economics and sociology at Randolph-Macon Woman's College during the absence of Professor Alton R. Hodgkins.

Frank J. Lewand, formerly social security analyst for the United States Social Security Board, is instructor in economics at the Catholic University of America.

E. R. Livernash, formerly of Massachusetts Institute of Technology, is instructor in the department of economics and sociology at Tufts College.

Edward E. Lewis of Howard University is a Carnegie associate to work on the business cycle study of the National Bureau of Economic Research.

Roswell C. McCrea retires as executive officer of the department of economics at Columbia University.

Gordon W. McKinley is instructor in economics at Lehigh University.

Alfred Manes of Indiana University has been elected honorary president of the Cuban Association for Insurance Studies.

James A. Maxwell, on leave of absence during the first semester of 1940-41 from Clark University, is making a study of the impact of federalism upon federal and state government finances in the United States.

Robert I. Mehr has resigned as instructor in economics at the University of Alabama to accept a similar position at the University Extension Center in Birmingham.

Horst Mendershausen of Colorado College is working at the National Bureau of Economic Research for one year as a Carnegie associate, devoting attention to the distribution of national income by size.

Otto O. von Mering, formerly of the School of Business Administration in Berlin, is lecturer in the department of economics and sociology at Tufts College.

Kenneth Middleton has been advanced from assistant instructor to instructor in statistics at the University of Kansas.

Glenn W. Miller has resigned from the University of Toledo and is instructor in the department of economics, Ohio State University.

Jonathan N. Mitchell is assistant in the department of economics at Massachusetts Institute of Technology.

Wesley C. Mitchell of Columbia University was awarded the degree of doctor of science at the University of Pennsylvania bi-centennial celebration.

C. W. Moore, assistant professor of marketing at the Harvard Graduate School of Business Administration, has been appointed chief of the Bureau of Business Research.

Richard Musgrave of Harvard University assisted during the summer in conducting studies of current monetary and banking problems for the Federal Reserve Bank of New York.

Otto Nathan of New York University taught in the summer school session of Columbia University.

James C. Nelson is principal economist on the research staff of the National Resources Planning Board. He is on leave from the Bureau of Agricultural Economics.

Milton N. Nelson, head of the department of economics, Oregon State College, is visiting professor of economics at the University of Illinois for the present academic year.

Ellis H. Newman, formerly of the University of Virginia, is on the faculty of economics at the University of Delaware.

Arthur J. Noetzel of Northwestern University is instructor in accounting at the University of Detroit.

Nylan Norris, who was appointed assistant professor of commerce at the University of Miami, has been called for service in the National Guard.

Thomas L. Norton, professor of economics at the University of Buffalo, is special industrial consultant of the United States Bureau of Labor Statistics.

Charles F. X. O'Brien is assistant professor of commerce at the University of Miami.

Clifton Oliver, Jr., is instructor in economics at Texas Christian University.

John T. O'Neil has resigned as instructor in economics at Lehigh University to accept a position at Northwestern University.

Philip Henry Overmeyer has been advanced from instructor in commerce to assistant professor of economic history at the University of Alabama.

Robert Dean Patton has been promoted to the rank of associate professor of economics at Ohio State University.

George Etzel Pearcy has been advanced from instructor in commerce to assistant professor of economic geography at the University of Alabama.

William J. Phillips, formerly of Tulane University and Clarkson College of Technology, is assistant professor of economics at Southwestern Louisiana Institute.

Arthur R. Porter, Jr., is instructor in economics at the Wharton School, University of Pennsylvania.

C. F. Poston is assistant in the department of economics, University of Illinois.

Elizabeth Redden has been promoted to associate professor of sociology at Goucher College.

Lloyd G. Reynolds, associate in political economy at Johns Hopkins University, will assist in the field of employment research with the Social Science Research Council. He served during the summer as research director for a Twentieth Century Fund study of labor and national defense.

C. O. Ruggles, professor of public utility management and regulation in the Harvard Graduate School of Business Administration, is director of research in that institution.

Ray F. Sadler is instructor in commerce at the University of Alabama.

Leonard A. Salter is assistant professor in the department of agricultural economics at the University of Wisconsin.

Paul A. Samuelson of Harvard University is assistant professor of economics at Massachusetts Institute of Technology.

Philip P. Schaffner has resigned from the department of economics, Ohio State University, and is engaged in research with the Federal Reserve Bank of Cleveland.

Franklin S. Scheider is instructor in economics at the University of Georgia.

Carl N. Schmalz has resigned as chief of the Bureau of Business Research at the Harvard Graduate School of Business Administration to become the comptroller of R. H. Stearns Company of Boston.

Josef A. Schumpeter of Harvard University is visiting lecturer in economics at the Yale Graduate School for the present academic year.

Arthur Schweitzer of the University of Wyoming spent the summer at Stanford University.

Lawrence H. Seltzer, professor of economics at Wayne University, Detroit, conducted studies of current monetary and banking problems for the Federal Reserve Bank of New York during the summer of 1940.

Howard Smith, assistant in economics at Louisiana State University, has been promoted to the rank of instructor in economics.

W. A. Spurr, assistant professor of statistics at the University of Nebraska, has been promoted to the rank of associate professor.

George T. Starnes of the MacIntire School of Commerce and Business Administration, University of Virginia, has been promoted to the rank of professor.

S. B. Stocking has been appointed to the staff in the department of political economy, University of Toronto, as a substitute for Professor H. R. Kemp.

Richard Stoyle has retired as associate professor of finance at the Wharton School, University of Pennsylvania.

Paul J. Strayer of Princeton University has been promoted to the rank of assistant professor.

Sidney C. Sufrin of the department of economics, Ohio State University, is with the Wages and Hours Division of the federal Department of Labor.

Maxine Yaple Sweezy is instructor in economics at Vassar College for the first semester of the current academic year.

Joseph H. Taggart, professor of finance at the University of Kansas, was on the 1940 summer staff of the University of Southern California.

Truman Tracy is assistant in the department of economics, University of Illinois.

H. Haines Turner is instructor in industry at the Wharton School, University of Pennsylvania.

Lyder L. Unstad has been advanced in rank to professor of economics at Alma College.

Pinkney C. Walker is instructor of finance at the University of Missouri.

W. Allen Wallis has returned to Stanford University after a year as research associate with the National Bureau of Economic Research under the grants-in-aid program of the Carnegie Corporation of New York.

Charles J. Walsh has been advanced to the rank of assistant professor of economics in the School of Business, Fordham University.

Willis J. Winn is instructor in finance at the Wharton School, University of Pennsylvania.

A. B. Wolfe has resigned as chairman of the department of economics, Ohio State University.

Elmer Wood, who held a Guggenheim fellowship last year, has returned to his duties at the University of Missouri.

Birchard E. Wyatt has been appointed lecturer in economics at the University of Michigan to teach Professor Haber's course in social insurance the first semester.

Ralph A. Young has been promoted to professor of economics at the Wharton School, University of Pennsylvania.

E. W. Zimmermann has returned to his duties at the University of North Carolina following a leave of absence spent with the Department of the Interior.